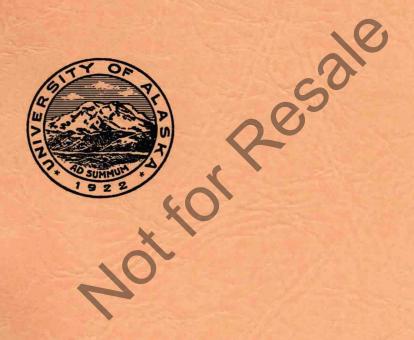
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Anthropological Papers of the University of Alaska accepts suitable original papers on any phase of Arctic or sub-Arctic anthropology. Photographs and line drawings should be kept to a minimum; excessive illustrations will be charged to the author. Correspondence should be addressed to the Editor.

Footnotes should be in the text, and bibliographies follow the form set forth in Volume 3, Number 2.

This publication will appear at irregular intervals.

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An Annotated Bibliography

Wendell H. Oswalt

THE KUSKOKWIM RIVER DRAINAGE, ALASKA: AN ANNOTATED BIBLIOGRAPHY

by Wendell H. Oswalt

The Kuskokwim River flows from the interior of Alaska into the southeastern sector of the Bering Sea. This river is second in size only to the Yukon River, which flows in a somewhat similar direction and just to the north of the area being considered. Some 50,000 square miles are drained by the Kuskokwim River system, which is regarded for purposes of the bibliography as ending at the downstream community of Eek along the river's estuary. This bibliography includes references to manuscript materials and unpublished records; journal and magazine articles; maps, magazine news briefs; government publications and releases; and books. Topical inclusion embraces ethnography, history, geology, geography, and ecology as well as public health and medicine. The rationale for compiling the bibliography stems from the difficulty in locating Kuskokwim references. The annotations have been included because many of the citations are brief and perhaps unimportant; by consulting the annotations time and effort might be saved in tracing materials further.

The compilation of this bibliography is an outgrowth of an interest in the anthropology of southwestern Alaska. In 1953 a bibliography of the basic literature was compiled as a first step toward fieldwork in the area. At that time the existing bibliographies, the Arctic Bibliography (1953), Murdock (1953), and Wickersham (1927) were consulted, and it was surprising to find how few Kuskokwim references were included. As the search was expanded, it became apparent that not only anthropologists but historians and others have taken comparatively little interest in the area. In most books which deal with Alaska very little information about the Kuskokwim is included. For example, in Bancroft's standard history of Alaska there are nine indexed references to the Kuskokwim (Bancroft, 1886), while Brooks' history contains twenty-three references (Brooks, 1953). Most histories have fewer citations: Andrews (1931), one; Colby (1945), two; Gruening (1954), seven; Hulley (1958), thirteen; Nichols (1924), one; and Thompson (1945), one. The quality of a book's index is not necessarily a reflection of the completeness of the text, but it does convey the idea of areas or topics neglected in coverage. When reading the Alaskan histories, one finds that only in the writings of Bancroft and Brooks is the Kuskokwim information not superficial. A further gauge to the continuing lack of general interest in the Kuskokwim is evident when consulting the Tundra Times, a weekly newspaper whose purpose it is to inform Alaskans in general and the Indians and Eskimos in particular concerning matters of interest to them. The *Tundra Times* was published first on October 1, 1962, and volume one includes only six news items for the entire Kuskokwim River drainage, all but one being brief notes. At the same time a major aggregate of the Eskimo population lives along the Kuskokwim. Coverage for this area contrasts sharply with that offered for most other sections of Alaska.

In 1954 a long-range program of Kuskokwim study was initiated, and a search was begun for all possible sources which had anything to do with the human and natural resources of the area. By this time the project had been extended beyond its original purpose, but it was assumed that the bibliography would provide a useful aid to anthropologists and others interested in the Kuskokwim. It is not assumed that the bibliography is complete, but it does represent a search of the literature over a period of 10 years. During this time a rather systematic effort was made to locate more obscure Kuskokwim materials at the Alaska Historical Library, Juneau, Alaska; the Bancroft Library, University of California, Berkeley, California; the Huntington Library, San Marino, California; the Jesuit Archives at Gonzaga University, Spokane, Washington; the Moravian Church Archives, Bethlehem, Pennsylvania; and the University of Alaska Library, College, Alaska.

Certain limitations exist concerning the nature and details of the bibliography which should be made clear at the beginning. The most severe limitation is that the materials from the Russian period have not been consulted thoroughly. Unquestionably, there exist in the Library of Congress and in the National Archives, as well as in the archives in the Soviet Union, materials pertaining to the Kuskokwim which are not included in this bibliography. Virtually all of the archival material consulted for the Russian period has been drawn from the first five volumes of Documents Relative to the History of Alaska. Furthermore, no attempt has been made to include newspaper items dealing with the area. One newspaper, The Kusko Times, was published at Takotna and then at McGrath during the 1920's, and a perusal of articles in it over a 3-year period revealed that there was comparatively little useful historical or ethnographic information in these issues. This probably is true for the other issues as well. Neither has an attempt been made to include items from the monthly Northern Consolidated Airline publication, The Midnight Sun; The NC Flag, published quarterly by the Northern Commercial Company; or the Aurora Borealis, the Bethel high school newspaper. Likewise, the Tundra Times articles are not included. Finally, no attempt has been made to include any of the Kuskokwim references to be found in The Proceedings of the Society of the United Brethren for Propagating the Gospel among the Heathen, which is a Moravian Church publication dealing with the activities of their missionaries along the Kuskokwim and elsewhere in the world. All of these periodicals and some additional ones are listed in the bibliography, but specific entries are not included.

There has been no overall attempt in writing the annotations to evaluate the quality of the included items except in certain instances where mistakes are glaring. For example, William H. Dall is not always a reliable source for historical information, and while his views of Kuskokwim history are included, an additional comment is made on the validity of his information. At the same time certain bibliographic items have been included which make no direct mention of the Kuskokwim but which are very important for understanding governmental policy or some other aspect of Kuskokwim life. When an entry has been included which contains only a brief mention of the Kuskokwim within a large volume, an attempt has been made to include the page references in order to facilitate consultation. Annotations which include information of a technical nature often are quoted from the original source.

For those who might be interested in library holdings which have been perused, the following observations are offered. At the Alaska Historical Library in Juneau, Alaska, most but not all of the items listed in the Wickersham bibliography are to be found, but comparatively little has been added to the basic collection. Furthermore, the Wickersham bibliography is not always reliable, particularly when citations imply that the holdings in the collection constitute all that has been published in a series. At the University of Alaska Library, the most important unpublished source is Documents Relative to the History of Alaska, which exists also in typescript at the Library of Congress. The Jesuit Archives of Gonzaga University contain very little material dealing with the Kuskokwim since Jesuit missionaries worked along the river only briefly. There are, however, some useful historical comments on the area by Julius Jette in note and manuscript form. The most useful holdings of the Bancroft Library, University of California, Berkeley, are the Pacific Manuscripts assembled by Ivan Petroff. The map holdings of the Bancroft Library are particulary good for the Kuskokwim region. In the Huntington Library, San Marino, California, are the papers of the Moravian Church missionary William H. Weinland; these deal primarily with the period 1884-87. Additional Kuskokwim sources are to be found in the Moravian Church Archives, Bethlehem, Pennsylvania. This collection probably constitutes the most important holdings anywhere which have not been fully utilized in the published literature on the area.

Translations from Russian sources were made by Dr. James VanStone, except where other translators are indicated, and those from German sources by Miss Dagmar Givant. These efforts are both acknowledged and appreciated. Furthermore, Dr. VanStone compiled the list of holdings in the Moravian Church Archives at Bethlehem, Pennsylvania.

References Cited

Andrews, Clarence. Arctic Bibliography. Brooks, Alfred H. Colby, Merle. Gruening, Ernest. Hulley, Clarence C. Murdock, George P.

Nichols, Jeannette P. Thompson, Stuart R. Wickersham, James. The Story of Alaska. Seattle, 1931. 3 vols. Washington, D.C., 1953. Blazing Alaska's Trails. Caldwell, 1953.

Alaska. New York, 1945.

The State of Alaska. New York, 1954. Alaska: Past and Present. Portland, 1958. Ethnographic Bibliography of North America.

New Haven, 1953.

Alaska. New York, 1924. Alaska. Norman, 1945.

A Bibliography of Alaskan Literature. Cordova, 1927.

BIBLIOGRAPHY

1. Alaska Conservation Society. Kuskokwim timber sought by Fairbanks firm. News bulletin, 1964, v. 5, no. 1, pp. 12-13.

It is recorded that Alaska Resources Incorporated had applied to the Bureau of Land Management for the right to cut 715,000,000 board feet of white spruce on the lower Kuskokwim, over a 20-year period. The logs would be exported to Japan. However, it is not known for certain that suitable timber is available.

2. Alaska Department of Fish and Game. 1962 annual report, Arctic-Yukon-Kuskokwim area. Anchorage (no date of publ.).

The Kuskokwim salmon species are discussed in terms of commercial and subsistence fishing as well as the biological investigations. Comparative information is provided for the years 1960–62. This report is the best published discussion of salmon fishing on the Kuskokwim.

3. —1963 annual report, Arctic-Yukon-Kuskokwim area. (no place or date of publ.; mimeographed).

Twenty-one pages are devoted to the Kuskokwim District. Included is a brief but comprehensive summary of commercial fishing operations in the recent past, maps of fish camps on the lower river, and catch statistics for king, dog, and red salmon.

4. Alaska Department of Health and Welfare. The McGrath project; report of a demonstration—study on the prevention of upper respiratory disease. Dept. of Health and Welfare, Div. of Public Health, State of Alaska. (no place of publ.), 1962 (offset).

This is the report of the 1957–60 study of 6 villages, including the Kuskokwim settlements of Aniak, Crooked Creek, and Kalskag. The study centered about "what practical measures could be found to lower the high prevalence of upper respiratory infection and to prevent

complicating sequelae. A two-pronged approach—clinical and educational—was utilized." The second phase consisted of an intensive educational program, the third phase was a restudy of the situation, and during the fourth stage the data was analyzed.

5. Alaska Department of Health and Welfare and U.S. Public Health Service. Baseline and service statistics—Bethel transmittal No. 1. May 10, 1962 (mimeographed).

The release consists of a series of tables dealing with Kuskokwim River area maternity and natality, infant mortality, morbidity, venereal disease, tuberculosis, domestic water, and major causes of death. The information included is an extremely valuable compilation of health statistics.

6. —Baseline and service statistics—Bethel transmittal No. 2. Aug. 7, 1962 (mimeographed).

A series of tables and texts dealing with the Kuskokwim area welfare aid as of January 1961 (Old Age Assistance; Aid to the Blind; Aid to Dependent Children); food resources; sanitation; morbidity and mortality for 1956–58.

 Baseline and service statistics—Bethel transmittal No. 3. Sept. 10, 1962 (mimeographed).

A series of tables and texts for the Kuskokwim area dealing with: professional workers in the area as of July 1962; accidents reported to the Bethel hospital; venereal disease control through July 1962; tuberculosis control for 1956–58; dental program of the Bethel hospital for 1956–60; crippled children's and chronic disease programs, 1956–58; eye, ear, nose and throat program among children, 1956–58; environmental sanitation summary.

8. —Baseline and service statistics—Bethel transmittal No. 4. Sept. 14, 1962 (mimeographed).

Texts dealing with: maternity and natality; infant mortality; child health and school health; crippled children's services and chronic diseases; and referrals. This release is to serve as an introduction to some of the sections of the Bethel Study.

9. Alaska's Health (Alaska's Health and Welfare beginning with v. 18, 1961). Accidental injuries are nearly 14,000. Feb. 1962, v. 19, p. 3. Projections of accident rates from November, 1960, to July, 1961, based on cases treated at hospitals include 137.9 per 1,000 residents in the Kodiak Election District; Bethel Election District, 102.9; Barrow Election District, 101.2. The greatest numbers of accidental injuries were among children under 5 years of age and young adults between 20 and 24 years of age. The ratio of males to females was 3 to 1.

10. —Aleutian and northern villages included in sanitation program. Aug. 1958, v. 15, pp. 1-2.

Mention is made that the Bethel area communities were the first to

come under the Sanitation Aide program when the first training course was held in May 1955. There is no other specific mention of the Kuskokwim.

-Around Alaska, as listed below.

Kuskokwim news items include:

- Community nursing service established at Bethel. 1949, v. 5, nos. 9-10, p. 4.
- 12. Disease and population decline on the Kuskokwim. 1945, v. 3, no. 10, no pagination.
- 13. Immune globulin for measles sent to the lower Kuskokwim. 1950, v. 8, nos. 3-4, p. 4.
- 14. Kwethluk children die from eating "Wild carrot." 1950, v. 8, nos. 11-12, p. 6.
- 15. Maternity classes begun at Bethel. 1950, v. 8, nos. 5-6, p. 4.
- 16. Tuberculosis vaccinations using BCG in Bethel area. 1949, v. 5, nos. 9–10, p. 4.
- 17. —Bethel area has chest x-rays, clinics. Oct. 1961, v. 18, p. 2.

 A general summary of the health facilities available at Bethel and the various organizations which have been cooperating in the program.
- 18. —Bethel diphtheria outbreak now considered controlled. Dec. 1952, v. 9, p. 1.
 - In the fall there were 119 cases of diphtheria in the Bethel area and 8 deaths. In an effort to control the outbreak 1,870 persons received antitoxin and 2,977 persons were immunized.
- 19. —Ear, nose and throat special demonstration project initiated. Aug. 1957, v. 14, pp. 1–2.
 - A discussion of the ENT (ear, nose and throat) demonstration project and the fact that it began on July 1 and included the communities of Aniak, Crooked Creek, and Kalskag on the Kuskokwim. See Alaska Department of Health and Welfare, The McGrath Project, for the final results.
- 20. —Health news items from various points 'around Alaska.' June 1951, v.
 9, no. 6, p. 10.
 Tuberculin tests and BCG vaccinations have been completed at the
 - Kuskokwim villages of Aniak, Akiachuk, Kwethluk, Napakiak, and Napaskiak.
- 21. —Rabid wolves and foxes reported in Alaskan north and interior. June 1954, v. 11, p. 4.
 - A report of laboratory tests on 2 foxes from the Bethel area which were rabid. These were submitted in mid-March, and it is noted that there were no rabies reports for Alaska in 1953.
- 22. —Specialists find ENT diseases are prevalent in some area. June 1956, v. 13, p. 8.

In a survey to determine the prevalence of ear, nose, and throat diseases in Alaska it was learned that the highest incidence of illness was in the Kuskokwim and Yukon areas as well as in the far northern communities. In two Kuskokwim area villages, of the 150 children examined 90% had severe ear and throat conditions.

23. Alaska Sportsman. Alaska Department of Fish & Game news letter. Alaska Sportsman, 1960, v. 26, no. 12, p. 30.

A survey of the Kuskokwim River fish runs indicated that 2,100 people fished on the river last year for subsistence needs. They took 19,457 king salmon, 70,580 red salmon, 266,487 chum, and lesser numbers of pinks and silvers, as well as sheefish, whitefish, and smelt. The area between Napakiak and Kwethluk had the largest number of fishermen. The survey provided information on the timing of the runs as well as the location of and the relative value of the spawning areas.

24. —Along northern trails at press time. Alaska Sportsman, 1960, v. 26, no. 10, pp. 24–25.

Under the subtitle "Alaska's Oil Begins to Flow" is described the Pan-American Petroleum Co. contract with the Department of the Interior for exploration for gas and oil over some 465,280 acres of land in the Napatuk Creek area of Bethel. They are to begin drilling three wells the first of March (1961).

25. —End of the trail. Alaska Sportsman, 1962, v. 28, no. 4, p. 43. Robert H. Romig, 64, who was born in Bethel, died in Anchorage on January 14, 1962. Mr. Romig had lived in Anchorage since 1919.

-From Ketchikan to Barrow. Alaska Sportsman, as listed below.

Kuskokwim news items include:

- 26. Aniak medical needs. 1956, v. 22, no. 1, p. 24.
- 27. Bethel Eskimo becomes a Roman Catholic priest. 1959, v. 25, no. 9, p. 30.
- 28. Bethel hospital. 1938, v. 4, no. 11, p. 19.
- 29. Bethel hospital. 1940, v. 6, no. 1. p. 20.
- 30. Bethel hospital. 1940, v. 6, no. 7, p. 21.
- 31. Bethel hospital fire. 1951, v. 17, no. 4, p. 26.
- 32. Bethel hospital. 1952, v. 18, No. 1, p. 30.
- 33. Bethel school. 1959, v. 25, no. 2, p. 23.
- 34. Cow at McGrath. 1940, v. 6, no. 8, p. 31.
- 35. Easter at Bethel. 1943, v. 9, no. 7, p. 20.
- 36. Eskimos from the Kuskokwim trained for work on the Pribilof Islands. 1955, v. 21, no. 8, p. 21.
- 37. Ice jam on the lower Kuskokwim. 1946, v. 12, no. 8, p. 25.
- 38. McGrath being moved. 1938, v. 4, no. 12, p. 19.
- 39. Molybdenum on the Kuskokwim. 1944, v. 10, no. 1, p. 22.
- 40. Moose on the lower Kuskokwim. 1941, v. 7, no. 4, p. 21.

- 41. Moose population in the winter of 1956-57. 1957, v. 23, no. 9, p. 25.
- 42. National Guard armories. 1960, v. 26, no. 4, pp. 18–19.
- 43. Nurse on the Kuskokwim. 1948, v. 14, no. 12, p. 22.
- 44. Ptarmigan population on the Kuskokwim. 1940, v. 6, no. 7, p. 21.
- 45. Reindeer losses. 1943, v. 9, no. 9, p. 22.
- 46. Riverboat on the Kuskokwim. 1936, v. 2, no. 3, p. 11.
- 47. Trade on the Kuskokwim. 1940, v. 6, no. 1, p. 19.
- 48. Trader at Takotna. 1950, v. 16, no. 5, p. 24.
- 49. Wolves on the Kuskokwim. 1944, v. 10, no. 1, p. 21.
- 50. Wolves on the Kuskokwim. 1955, v. 21, no. 9, p. 22.
- American Bible Society. Kanerearakgtar. American Bible Society, New York, 1956.

A New Testament translation of the Bible into Yuk.

52. Anderson, Eva Greenslit. Dog-team doctor, the story of Dr. Romig. Caldwell, 1940.

Joseph H. Romig was the brother of Edith Kilbuck, the wife of one of the first two Moravian missionaries to be stationed on the Kuskokwim. Romig was attracted to the medical profession by the Moravians' need for a medical missionary. He arrived on the Kuskokwim in 1896 and began the first local medical practice. This book is filled with meaningful historical and ethnographic information including the origins of the word Kuskokwim (p. 49), the description of an aboriginal dwelling (pp. 54–57), clothing (pp. 64–66), marriage (pp. 67–69), shamans and medicinal cures (pp. 70–84), folktales (pp. 85–92, 118–20, 240–41), ceremonies (pp. 106–10), and the epidemic of 1900–01 (pp. 191–205).

53. Anderson, H. Dewey and Walter Crosby Eells. Alaska natives. Stanford, 1935.

The purpose of this 1930-31 study was to conduct a general survey of sociocultural conditions among the aboriginal peoples of Alaska, with particular emphasis upon educational attainments and needs. The Kuskokwim information is quite limited. Only the communities of Akiachak, Akiak, McGrath, and Bethel were visited by the field party. The general Kuskokwim textual references are superficial although Bethel and Akiak information is scattered through the text. The most useful Bethel information includes: house old membership, including living as well as dead members (Table 18, p. 110); the presence of a nurse at Bethel (p. 143); Moravian missionary work (pp. 206-07); Goodenough Intelligence Quotients for 27 Bethel children, 98.5 mean (Table 130, p. 314); and the public health nurse's report which is very good (pp. 407-10). Useful Akiak information is as follows: the reservation status (p. 145); a problem of inheritance (p. 147); Goodenough Intelligence Quotients for 10 children, mean 97.8 (Table 130, p. 314); the hospital (pp. 143, 406).

54. Aronson, Joseph D. The history of disease among the natives of Alaska. Transactions & Studies of the College of Physicians of Philadelphia, Feb. 1941, Fourth Series, v. 8, pp. 27–34.

Summary of historical sources on disease among Alaskan natives. Concludes that smallpox, syphilis and tuberculosis were all probably introduced by whites.

55. —The history of disease among the natives of Alaska. Alaska's Health, 1947, v. 5, nos. 3, 4, 5, 6, 7, no pagination (about two pages of text in each issue).

This article was published originally in the Transactions & Studies of the College of Physicians of Philadelphia. The republication in Alaska's Health includes subheadings not in the original and the references are omitted.

56. Atlantic Monthly, The. Russian America. The Atlantic Monthly, 1867, v. 19, no. 116, pp. 731-50.

Included in the article is a 4-page summary of Zagoskin's Kuskokwim and Yukon river travels. In the University of Alaska Library copy the author is inked in as J. H. A. Bone.

57. Aurora Borealis. Bethel (mimeographed).

The Bethel high school newspaper by this name includes not only school but community news. v. 4, no. 4 is dated May, 1956.

58. Babbott, Joan G. et al. Arctic environment and intestinal infection.

American Journal of the Medical Sciences, 1956, v. 231, no. 3, pp. 338–60. A good summary of arctic health with a few Kuskokwim references such as to the Kuskokwim and the bacillary dysentery epidemic in 1944.

Bäer, Karl E. von. See Richardson, John.

59. Baker, Marcus. Geographic dictionary of Alaska. U.S. Geological Survey Bulletin 187, 1902; second edition, Bulletin 299, 1906.

An introduction which includes a statement about each consulted source is a highly useful summary of Alaskan explorations. The text includes many Kuskokwim names and is useful for checking many village locations.

 Bancroft, Hubert Howe. History of Alaska, 1730–1885. San Francisco, 1886.

The trip of the *Constantine* to the Kuskokwim estuary is mentioned (pp. 521–22) as well as the 1822–24 coastal survey from Bristol Bay to the Kuskokwim mouth and in the Norton Sound area (p. 546). The Kuskokwim explorations of Vasil'ev, accompanied by Alexander Kolmakov, are cited. The selection of a trading post site by Kolmakov and the fact it was built two or three years later is mentioned. In 1841 Kolmakov Redoubt was constructed (p. 547); Zagoskin's travels are briefly noted (pp. 553–54).

61. —The native races, wild tribes. v. 1. San Francisco, 1886.

In a single paragraph (p. 77) the "Kuskokwigmutes" are described as occupying permanent settlements in the winter but scattering in the summer; most males live in the kashim; the shaman beats his drum in the morning; at daybreak the men go out to hunt or fish and return to the kashim, leaving the women to care for the fish or game they took; finally the men visit their wives at night and return to the kashim before daylight. The information appears to be from Wrangell.

62. Barnum, Francis. The Catholic missions in Alaska. Historical Records and Studies, United States Catholic Historical Society, May 1919, v. 13, pp. 87–100.

There is only a brief mention of the Roman Catholic Church beginnings on the Kuskokwim and the first mission station (p. 100).

- 63. —Grammatical fundamentals of the Innuit language. Boston, 1901. The grammar is for the Eskimo language as it is spoken is southwestern Alaska. In terms of present linguistic groupings these people would be regarded as Yuk, Yuit, or Yupik speakers, not Innuit. This grammar and the one by John Hinz are the standard sources of Yuk.
- 64. —Life on the Alaska mission, second series of letters. Woodstock Letters, 1893, v. 22, pp. 420–56.

This Jesuit missionary describes the geography of the Yukon and Kuskokwim river regions in general terms and then describes a winter trip to the Kuskokwim. He crossed the portage from the Yukon to Kalskag, and went to Ohagamiut where a mission house had been built. The previous year Father Tosi had contracted for the building. Barnum went on to Kolmakov, describing the station and the trader. He then returned to the Yukon. The bulk of the article deals with the Roman Catholics and their work along the Yukon River.

65. Barsukof, Ivan. The works of Innocent, Metropolitan of Moscow. 3 vols. (translated title). Moscow, 1887.

Volume two includes a chapter titled, "The Condition of the Greek Orthodox Church in Russian America," (pp. 35–41), in which the Kuskokwim is mentioned. Veniaminov mentions that he granted permission to the manager of Kolmakov Redoubt to baptize "those savages who themselves inquire about it." He mentions when at Nushagak for a second time in 1832 (Veniaminov's first Nushagak visit was in 1829), seventy members "from the savages of various villages" had been baptized. Vasil'ev is quoted as believing "that there are up to 700 inhabitants on the Kuskokwim River."

66. Basanoff, V. Archives of the Russian Church in Alaska in the Library of Congress. The Pacific Historical Review, 1933, v. 2, pp. 72–84.

The very general inventory of the Alaska Church Collection of the Russian Orthodox Church appears in more detail in the study by Dorosh. Furthermore, some of the materials are listed or translated in Documents Relative to the History of Alaska. Basanoff makes no specific reference to the Kuskokwim materials.

67. Bean, Tarleton Hoffman. The fishery resources and fishing-grounds of Alaska. The Fisheries and Fishing Industries of the U.S. 1887, sec. 3, c, pp. 81–115.

The brief description of Kuskokwim fisheries is taken from the 10th census report of Petroff.

68. Berg, H. C. and E. M. MacKevett, Jr. Structural control of quicksilver ore at the Red Devil mine, Alaska. Science in Alaska, 1959, p. 106. Seattle, 1960.

The largest quicksilver mine in Alaska is the Red Devil, located on the Kuskokwim River. The "mapping indicates that most ore bodies are localized near intersections between altered dikes of Tertiary age and bedding-plane faults in thin- to medium-bedded graywacke and shale of the Upper Cretaceous Kuskokwim group." No historical or anthropological information is included.

69. Bergsland, Knut. Aleut demonstratives and the Aleut-Eskimo relationship. International Journal of American Linguistics, 1951, v. 17, no. 3, pp. 167-79.

One of the southwestern Alaskan Eskimo vocabularies consulted was the Kuskokwim Eskimo grammar and vocabulary by Hinz.

70. Bielkov, Z. and I. Netsvietov. Molitvy i piesnopieniia na kvikhpakskokuskokimskom nariechii. Translation of the title is Prayers and canticles in the Yukon-Kuskokwim dialect. New York, 1896.

In v. 1, pp. 314–15 of Documents Relative to the History of Alaska is an excerpt from a letter by the lay reader Vasily Orlov, stating that he was submitting "two notebooks with my translations from the church books into Aglegmute and Kuskokwim languages" for approval and publication. The letter is dated August 4, 1871, and at this time Orlov was apparently a subordinate of Zakhary Belkov at the Kwihpah Mission (Russian Mission).

71. Birket-Smith, Kaj. The Eskimos. London, 1959.

Interestingly and significantly this definitive semi-popular book on Eskimos includes only a single reference to the Kuskokwim (p. 221). It concerns a pictorial system for writing Eskimo based on Eskimo graphic art.

72. Blomquist, Edward T. and Edward S. Weiss. The tuberculosis problem in the Pacific territories: Alaska. Transactions, National Tuberculosis Association, Forty-Ninth Annual Meeting, 1953, pp. 46–49.

It is noted that tuberculosis deaths among whites in Alaska are 37.5 per 100,000, while for natives there are 662 per 100,000. The Bethel area situation is noted as follows: "If tuberculosis can be said to be epidemic anywhere, I believe it is among the Eskimos of the Bethel area." It is further noted that the present facilities in the Bethel

area should be increased.

73. The Board of Christian Education and Evangelism. The Moravian Church in Alaska. Bethlehem, n.d.

Contains short articles about Moravian missionary work in Alaska and about other topics as well. The articles which deal directly or indirectly with the Kuskokwim include such subjects as: the founding of the Bethel mission; problems of the missionaries; the Bethel mission center in the 1950's; the problems of teachers; the Moravian Orphanage at Nunapitsingak; and health problems. The most recent referenced date in this publication is 1959.

74. Brooks, Alfred Hulse. Blazing Alaska's trails. Caldwell, 1953.

Brooks mentions that Alexander Kolmakov explored the lower Kuskokwim in 1820 (p. 210) and that he explored the same region in 1829 (p. 226). The trip of Vasil'ev from the Nushagak to the Kuskokwim is recorded as having taken place in 1829 (p. 227) and that Kolmakov established a Kuskokwim trading post in 1832 (pp. 227–28). The trading post, built by Lukin, was 100 miles below the Holitna River junction according to Brooks (p. 228). There is brief mention of the Kuskokwim travels of Lukin and Kolmakov (pp. 228–29). The Glazunov trip of 1833–34 is mentioned (pp. 229–30) as well as the travels of Zagoskin (pp. 232–34). The travels of Nelson (p. 273), Petroff (p. 274), and various members of the U.S. Geological Survey (pp. 285, 288–89) and Densmore (p. 292) are briefly cited.

75. Cady, W. M. et al. The central Kuskokwim region, Alaska. U.S. Geological Survey Professional Paper 268, 1955.

The geology of the central Kuskokwim River region, from Aniak to Stony River, is presented along with a brief introduction to the history, the fauna, flora, geography, population and settlements. The most useful historical information concerns the various gold strikes.

Carter, Thomas H. Compilation of narratives of explorations in Alaska.
 56th Congress, 1st Session, Senate Report No. 1023. Washington,
 D.C., 1900.

Raymond, Charles P. Reconnaissance of the Yukon River. pp. 17–41. It is commented that Ivan Simonsen Lukeen, described as a Russian company employee at St. Michael, reached Fort Yukon in the summer of 1863 and was the first person to make the trip from the Bering Sea coast to the Fort Yukon area (p. 19). In the same article it is mentioned that a Mr. Zandt, who was a trader, traveled along the Kuskokwim River drainage in 1869. His account is specifically mentioned in connection with a description of the Yukon-Kuskokwim portage (p. 31).

Petroff, Ivan. Population, resources, etc., of Alaska. pp. 53-281.

Published as a part of the Federal census of 1880. Reference to this report appears under U.S. Bureau of Census, Petroff, Ivan.

77. Christian Herald, The. Alaska's wild tribes redeemed. The Christian Herald, 1892, v. 5, no. 49, pp. 777–82.

The article is drawn from an interview with Mrs. John Henry Kilbuck. She describes the establishment of the Bethel mission of the Moravian Church in 1885. She discusses the general problems of Eskimo illnesses, introducing a school, and a "Messiah Dance" on the Kuskokwim.

- 78. Cobb, John N. Pacific salmon fisheries. Report of the United States Commissioner of Fisheries, 1930, pp. 409–704. Washington, D.C., 1931. Kuskokwim River salmon fishing is discussed briefly (pp. 468–69). Note is made that this river has been little exploited. In 1906 a salting outfit was sent there, but it arrived too late for the run. The fish wheel is also discussed (pp. 484–85) but not with details about its introduction to the Kuskokwim. No anthropological information included.
- 79. Colby, Merle. A guide to Alaska, last American frontier. New York, 1939.

One chapter, titled "Bristol Bay and the Kuskokwim country," (pp. 350-61) includes brief mention of explorations and settlements (pp. 360-61).

80. Collier, John. Office of Indian affairs. Annual report of the Secretary of the Interior, for the fiscal year ending June 30, 1938, pp. 209-63. Washington, D.C., 1938.

Under the section titled "Health work among Alaskan natives" and the subsection "Communicable diseases" it is commented that there was a striking occurrence of epidemic meningitis along the lower Kuskokwim region, but no additional details are given except that the spread of the disease was curbed (p. 243).

81. —Office of Indian affairs. Annual report of the Secretary of the Interior, for the fiscal year ending June 30, 1939, pp. 23–68. Washington, D.C., 1939.

Mention is made that along the lower Kuskokwim River there was a whooping cough epidemic which resulted in the deaths of 40 young children (p. 50).

- 82. Collins, Henry B. Arctic area. Mexico, D.F., 1954.
 - This small volume is unquestionably the best summary in brief of Eskimo archaeology and ethnography. The references to the Kuskokwim are scattered and few in number, but this is understandable since it is a poorly known region.
- 83. Colyar, A. B. Arctic Health Research Center, an introduction. Alaska Medicine, 1959, v. 1, no. 1, pp. 31-33.

Discusses the organization and purpose of the Arctic Health Research Center. Mentions the Kuskokwim study of Eskimo methemoglobinemia. "Methemoglobinemia, a rare disorder, congenitally acquired, is fairly common among Kuskokwim Eskimos. The disease is characterized by cyanosis, and is precipitated by deficiency of Vitamin C."

84. Cone, C. Edward. Kooyanna—a tale of the Kuskokwim. The Pathfinder of Alaska, 1923, v. 4, no. 3, pp. 5-6, 27.

The story of a white prospector rescuing an Eskimo girl with frozen feet and their trip to the Bethel Moravian mission.

85. Craft, Charlene. The last of the Telidas tells his story. Farthest North Collegian, 1950, v. 30, no. 1, pp. 13–15, 28.

A popular account of an archaeological field trip to the Lake Telida area. Included is fragmentary ethnographic and historical data.

86. Crawford, Glenn B. Chicken pox pneumonia in a child. Alaska Medicine, 1959, v. 1, no. 1, pp. 12–14.

Report of a female Eskimo child with fatal chicken pox pneumonia. The case was observed at the Bethel hospital and involved a child from the Kuskokwim.

87. Dall, William H. Alaska and its resources. Boston, 1870.

Dall mentions the Kuskokwim explorations of Ivan Simonsen Lukeen (Lukin) in 1832. Dall met Lukin and records that he was born at Ross in California of Russian and Spanish-American parents. He was educated in Sitka and was a clerk at Kolmakov when Dall first saw him (p. 274, fn). It is recorded further that the river mouth was visited in 1818 by Korsakov and explored for a considerable distance by Kolmakov in 1820. No post was established until 1832. The post "Lukeen's Fort" was built on the Kuskokwim about fifty miles below the Hulitnak (Holitna) River mouth. He, Lukin, remained for seven years. In 1835 Glazunov explored the Kuskokwim "mouth," and after time the post was called a redoubt. In 1841 some parts of the redoubt were destroyed by fire, and Kolmakov supervised the rebuilding. In 1866 the post was dismantled under Dementoff (pp. 274-75). In a chronology of explorations Kuskokwim entries include: 1829 Vasil'ev "explored the coast of the Kuskokwim"; 1830 "Kolmakoff renewed his explorations toward the Kuskoquim"; 1832 "Lukeen was sent across the portage from Nushergak to the Kuskoquim, where he established a trading-post" (p. 336); 1835, "Glasunoff explored the deltas of the Yukon and Kuskoquim rivers, ascending the former to Anvik"; 1836, "Kolmakoff ascended the Kuskoquim with bidarras" (p. 338); 1841, "Lukeen's Fort on the Kuskoquim was partly destroyed by the Indians" (p. 340); 1861, the territory was divided into six districts "St. Michael's, including Norton Sound, the Yukon, and the Kuskoquim" (p. 350). In a discussion of the aboriginal inhabitants the Koskwogmuts" are described as occupying "both shores of the river and some distance up that river." The people call themselves "Kuskwogmut" and are the "Kuskutchewak" of Bäer and Richardson and "Kuskokwigmut" of Holmberg (pp. 405–06). This book by Dall should be consulted with caution, for he is often incorrect and misleading.

88. —The discovery and exploration of Alaska. Harriman Alaska Series Expedition, Washington, D.C., 1910, v. 2, pp. 185–204.

Mentions the establishment of Fort Kolmakov in 1832, and that in 1835 the lower Yukon and Kuskokwim rivers were explored by Glazunov (pp. 198–99).

89. —The native tribes of Alaska. Proceedings of the American Association for the Advancement of Science, 34th Meeting, 1886, pp. 363-79. The Kuskokwim River Eskimos are classified by Dall as Southwestern Innuit and were noted as being found by Nelson to extend "reaching nearly or quite to Kolmakoff trading post."

90. —On the distribution and nomenclature of the native tribes of Alaska and the adjacent territory. Contributions to North American Ethnology, 1877, v. 1, pp. 7–40.

The ethnic boundaries of the Kuskwogamiut are defined, but incorrectly.

91. —On the distribution of the native tribes of Alaska and the adjacent territory. Proceedings of the American Association for the Advancement of Science, 18th Meeting, 1870, pp. 263-73.

The statements on the Kuskokwim are as follows: "Kuskokwigmutes, on the Kuskoquin River, from Fort Kolmakoff to the sea, and also on the island of Nunivak" (p. 264). "Kuskwogmutes inhabit the mouth and lower banks of the Kuskoquim River" (p. 267).

-See also U.S. Commissioner of Indian Affairs.

Delaney, A. K. See U.S. Secretary of the Interior, annual report.

92. Dice, Lee Raymond. The land vertebrate associations of interior Alaska. Occasional Papers of the Museum of Zoology, University of Michigan, 1920, no. 85, pp. 1–24.

The general faunal and floral associations for the Kuskokwim River area are more clearly defined in this paper than in any other source.

93. —Notes on some birds of interior Alaska. The Condor, 1920, v. 22, no. 4, pp. 176-85.

Included is a record of birds observed along the Kuskokwim from Bethel upstream to the North Fork. These observations were made in 1911–12. No historical or ethnographic information is included.

94. Disselhoff, H. Dietrich. Observations on fingermasks of the Bering Sea Eskimo (translated title). Baessler Archives, 1936, v. 19, nos. 3-4, pp. 181-87.

Maskets and fingermasks from the Kuskokwim are mentioned briefly to contrast these with the Bering Sea Eskimo maskets.

95. —Observations on some Eskimo masks from the Jacobsen collection of the Berlin Museum for Folk Culture. (translated title). Baessler Archives, 1935, v. 18, no. 1, pp. 130–37.

Descriptions of Ingalik and Eskimo masks, some of which are from Kuskokwim Eskimos. The collection is analyzed in terms of mask functions and forms. The forms vary from shamanistic masks, to nature spirits, to totemic masks, and realistic ones.

Documents Relative to the History of Alaska, Alaska History Research Project, 1936–38, mss. v. 1, pp. 364–67. Alaska Church Collection [henceforth ACC] (Russian Orthodox Greek Catholic Church), Box 294.

- 96. Administration of the missions. A letter from Etolin, dated December 23, 1884, to Bishop Innokenty concerning a second request about starting a permanent Kwihpah mission, contains a note by Bishop Innokenty, dated February 1, 1845, to Novo-Arkhangelsk Ecclesiastical Consistory. The Bishop requests that a special ukases be issued to the Nushagak and Keni missionaries that the Nushagak missionary should not in the future consider the Kuskokwim and Chulitna (Holitna) river peoples in his parish and should stop visiting them. The Keni missionary should take charge of these people and include them in his records and regulations as well as visit them at the first opportunity.
- 97. —v. 1, pp. 199–263. ACC Boxes 31, 57, 58, 130, 175, 216, 217, 218, 250, 251.

Biographical sketches of Orthodox priests. Included among the priests or songleaders who worked along the Kuskokwim drainage are the following: Nickifor N. Amkan, Matthew I. Berezkin, Hieromonk Illarion, Nicholas A. Kamilakojhin, Peter P. Kasherarov, Jacob K. Korchinsky, Michael V. Kukichook, John E. Orlov, Konstantin A. Pavlov, Innokenty K. Shayashnikov, Hieromonk Theophil (the latter is not mentioned as a Kuskokwim missionary in these sketches, but he traveled there as noted in his travel journal in ACC Box 490. Documents Relative to the History of Alaska, v. 2, pp. 141–42).

- 98. —v. 1, p. 49. ACC Box 295, item b.

 Chapels on Kodiak Island and the Kuskokwim, 1843–1844. No translation, listing only.
- 99. —v. 1, p. 91. ACC Box 578, item a. Church and clergy list for the Kuskokwim, 1904. No translation, listing only.
- 100. —v. 1, p. 107, ACC Box 582, item c.

 Class journal of the Kwihpah school, 1886, 1890; Kuskokwim, 1890.

 No translation, listing only.
- 101. —v. 1, p. 89. ACC Box 517, item a.

 Dictionary of Kwihpah, Kuskokwim and Russian. No translation,

listing only as dictionary, ms, not completed, no date, no name. 102. —v. 2, pp. 158–59. ACC Box 306.

Intoxicants in Russian-America. A letter dated November 23, 1844, from the Board of Directors of the Russian-American Company to the Administrator-General of the Russian-American Company. Concerns prohibition order for the colonies—save for ships, holidays, and emergencies. No mention of Kuskokwim but seemingly important for the Kuskokwim.

103. —v. 2, p. 157. ACC Box 306.

Intoxicants in Russian-America. A letter from the Administrator-General to Bishop Innokenty, dated September 19, 1845, notes that an order was issued to stop the sale of all alcoholic beverages in the colonies. The Bishop added a note to inform the clergy and the Ecclesiastical Consistory which further states "executed." The Kuskokwim is not mentioned, but the order probably had a bearing upon Kuskokwim inhabitants.

104. —v. 2, p. 127. ACC Box 488.

Journal of Zachary Belkov. Father Belkov comments upon the arrival of the Moravian missionaries, Weinland and Kilbuck, on the Kuskokwim River. Translator's note.

Journal of Hieromonk Illarion, 1861–68. The partial translation of this missionary account of travels along the lower Yukon and Kuskokwim rivers contains valuable information on the late Russian period. For a description of the ethnographic and historical information see Oswalt, Wendell H., Eskimos and Indians of western Alaska, 1861–1868, extracts from the diary of Father Illarion. Anthropological Papers of the University of Alaska, 1960, v. 8, no. 2, pp. 100–18.

106. —v. 2, pp. 146-47. ACC Box 460.

Journal of Vasily Shishkin. The priest Shishkin in August 1884 mentions the arrival of the Moravian missionaries on the Kuskokwim River and the need for an Orthodox priest to be stationed there.

107. —v. 2, pp. 141–42. ACC Box 490.

Journal of Hieromonk Theophil. In June 1866 Hieromonk Theophil started to the Kuskokwim River. There are brief, but useful, comments upon the shamans.

108. —v. 1, p. 113. ACC Box 600, item b.

Mission report, 1861. Financial report of the Kuskokwim mission.
1861. No translation, listing only.

109. —v. 1, p. 113. ACC Box 601, item i.

Mission report, 1862. Financial report for the Kuskokwim chapel in 1862. No translation, listing only.

110. —v. 1, pp. 378-79. ACC Box 302.

Mission report, 1863. In a report upon the Kwihpah mission for 1863

by Hieromonk Illarion, it is noted that the people are living peacefully "except those inhabiting the coastal region at the mouth of the Kuskokwim River where an epidemic swept away a large number of them..." Further it is noted of the Kuskokwim people that "indifference to the Christian religion and its sacraments is especially pronounced among the natives living at the mouth of the Kwihpah and Kuskokwim rivers."

- 111. —v. 1, pp. 314–15. ACC Box 309.
 Mission report, 1871. The churchman, Zachary Belkov of the Kwihpah mission, reported in 1871 that he was submitting "translations from the church books into Aglemute and Kuskokwim languages" which he hoped could be published.
- 112. —v. 1, p. 61. ACC Box 441, item g. Mission report, 1873. Listed only as "Letters and reports of Reverend Innocent Shaiashnikov about inspection of Kuskokwim and Nushagak Missions, 1873."
- 113. —v. 1, p. 155. ACC Box 441.

 Mission report, 1878. Excerpts of a report from Innokenty Shayashnikov, the priest at Unalaska to Bishop John, September 29, 1878, states that the people were pleased to see him but complained about being abandoned by the Orthodox Church. At Kolmakov Redoubt "the chapel has neither icons nor roof, and where nobody cares to repair it."
- 114. —v. 2, p. 5. ACC Box 130.

 Mission report, 1891, 1900, 1905. The Orthodox Church on the Kuskokwim, assumed to be Little Russian Mission, is reported to have a permanent missionary appointed in 1891. In 1900 there were some 287 men and 295 women as members. In 1905 there were 276 men and 274 women.
- 115. —v. 1, pp. 24–25. ACC Boxes 127–33.

 Mission report, 1895–1911. Materials from the Saint Sergius Church, Russian Mission and Kuskokwim, for the years 1895–1911. No translation, listing as records of births, marriages, deaths, confessional records, converts, expenses and income.
- 116. —v. 1, p. 130. ACC Box 636, item c. Mission report, 1895. Matrimonial inquests at Kuskokwim mission in 1895. No translation, listing only.
- 117. —v. 1, p. 86. ACC Box 504, item e.

 Mission report, 1896. J. Korchinsky letter about the Kuskokwim mission in 1896. No translation, listing only.
- 118. —v. 1, p. 118. ACC Box 607, item e.
 Mission report, 1898. Report about the churches and schools of the Unalaska district; Kuskokwim included. No translation, listing only.
- 119. —v. 1, p. 121. ACC Box 615, item d.

Mission report, 1898–1899. Report about conditions including the Kuskokwim for August 11, 1898, and December 22, 1899. No translation, listing only.

- 120. —v. 2, pp. 327, 330. ACC Boxes 509, 510.

 Mission report, 1898, 1899, 1916. Kuskokwim parish membership in 1899 is recorded as 57 creoles and in 1898, as 1,761 Eskimos; in 1916 parish membership was 17 Russians, 17 creoles, 2 miscellaneous men and 586 "Aleuts."
- 121. —v. 1, p. 122. ACC Box 618, item b.

 Mission report, 1900. This report upon the conditions of Alaskan parishes in 1900 is not translated but includes a translator's note to the effect that the churches are considered separately; since this is an "unofficial" report, they are more candid than might be expected.
- 122. —v. 1, p. 105. ACC Box 578, item a.

 Mission report, 1900–1901. Report upon the conditions of the Kuskokwim mission in 1900–01. No translation, listing only.
- 123. —v. 1, p. 109. ACC Box 588, item g.

 Mission report, 1902. Report upon the condition of the mission at
 St. Michael for September 21, 1902; Kwihpah and Kuskokwim,
 September 24, 1902. No translation, listing only.
- 124. —v. 1, p. 166. ACC Box 447.

 Parish and church on the Kuskokwim. One church listed along with one parish house for the year 1879.
- 125. —v. 2, pp. 6–8. ACC Boxes 54–57.

 Population figures for the Kuskokwim and other areas, 1845–1880.

 Summary of populations at Kolmakov and the Kuskokwim for 1845, 1855, 1860, 1865, 1876, 1880. Includes sex breakdown for the church members and totals for the nonbaptized.
- 126. —v. 2, pp. 331, 332, 334. ACC Boxes 509—10.

 Population figures for the Orthodox Church members on the Kuskokwim in 1899 and 1916. In 1899 there are recorded for the Kuskokwim, 7 male births, 5 female births and 6 male deaths; 1 female death and 4 marriages. In 1907 there were 12 male births, 11 female births; 4 marriages; 12 male deaths and 12 female deaths. In 1916 there were 9 male births, 14 female births; 3 marriages; 5 male deaths and 2 female deaths.
- 127. —v. 1, p. 192. ACC Box 409.

 Priest and songleader on the Kuskokwim in 1894. In the minutes of the consistory, January 11, 1894, some 1,800 rubles are allotted to the Kuskokwim priest and 600 to the songleader.
- 128. —v. 1, p. 62. ACC Box 441, item r.

 Report of Reverend Basil Shishkin of his work at the Nushagak
 and Kuskokwim missions, 1877–1878. No translation, listing only.

- 129. —v. 2, p. 351. ACC Box 299.

 School under the Orthodox Church at Nushagak in 1844 and 1845.

 In 1844 enrollments at the Nushagak school included 3 boys from the Kuskokwim, while in 1845, there were 6 Kuskokwim boys.
- 130. —v. 2, pp. 343-44. ACC Boxes 509, 510.

 School under the Orthodox Church on the Kuskokwim 1899 and 1907.

 In 1899 there are listed for the Kuskokwim school, 5 boys and 4 girls as attending. In 1907 there are listed 4 boys and 3 girls. No reports for 1914 and 1916 are given for the Kuskokwim, and it is assumed that the school was by these dates no longer functioning.

Documents Relative to the History of Alaska, Alaska History Research Project, 1936–1938, mss. v. 4, pp. 243–44. Department of State, Historical Archives, Alaska, Russian-American Company Archives.

- 131. Kuskokwim River reference in 1821. Venedict Kramer and Andrei Severin, as directors of the Russian-American Company, wrote to General Muraviev, Administrator, a letter dated March 15, 1821. The letter rejects the Yanovsky reports that the Novo-Alexandrovsk fort at Nushagak be moved to the "Kust-Kokhan" River arguing that the Kust-kokhan River conditions are not known and it can only be reached from the sea.
- 132. —v. 4, pp. 321–22. Department of State, Historical Archives, Alaska, Russian-American Company Archives.

Kuskokwim River reference in 1822. In a letter by Venedict Kramer and Andrei Severin, dated August 25, 1822, to General Muraviev it is mentioned that two "Kust-kokhans" visited Korsakovsky at New Alexanderovsk reporting an island, thought by the directors to be perhaps, Nunivak, discovered by Vasil'ev in 1821. The directors in the letter are concerned about furthering contacts with Nunivak.

Documents Relative to the History of Alaska, Alaska History Research Project, 1936–1938, mss. v. 5, pp. 11–12. Russian Orthodox American Messenger, Dec. 27, 1897, v. 2, pp. 262–63.

- 133. Russian Orthodox population of Alaska in 1895–1896. The Orthodox population of Alaska in 1895–96 is considered by the church authorities as a reaction to the 11th Federal census report of 1890. The Kuskokwim Orthodox parish population is given at 1,484, while a breakdown by "nationalities and tribes" is given as 1,049 males and 1,208 females.
- 134. —v. 5, pp. 36–45. Russian Orthodox American Messenger, Oct. 15–27, 1899, pp. 534–42; Nov. 1–13, 1899, pp. 564–74. v. 3, 1899. Russian Orthodox missionary policy, 1899. Published under the title, "Of the most Rev. Metropolitain Innocentius, formerly Archbishop of Kamchatka, of the Kuril and Aleutian Islands, to the Missionary at

Nushagak, Theophanus, Hiero-monk," this is a statement to guide the missionary. The partial translation in Documents Relative to the History of Alaska is very informative. The following kinds of instructions are included: refrain from hasty baptisms; the modification of fasting rules with local dietary conditions; respect for local custom; not giving presents to neophytes; be gentle with the people and do not coerce them; do not engage in commercial activities; learn the language; and do not meddle in temporal matters.

135. —v. 5, pp. 61, 64. Russian Orthodox American Messenger, March 15-28, 1900, v. 4, pp. 159, 163.

Schools under the Orthodox Church. In a report on the schools of the Russian Orthodox Church in Alaska the Kuskokwim is given as having a primary school with 9 pupils under the supervision of a priest and his assistants.

136. Dorosh, John T. The Alaskan Russian church archives. Quarterly Journal of Current Acquisitions, Library of Congress, 1961, v. 18, no. 4, pp. 193-203.

There is one specific mention of Kuskokwim materials (p. 198) in this article. The paper is a general survey of the Library of Congress holdings in Russian activity in Alaska. The vast majority of the archival materials are from church sources. Mention is made of the Documents Relative to the History of Alaska, and an index to the volumes containing Russian sources is included (pp. 202–03). The Documents include numerous Kuskokwim references which are included in this bibliography.

137. Drebert, Ferdinand. Alaska missionary. Easton, 1959.

F. Drebert went to Alaska as a Moravian Church missionary in 1912; the major portion of his account concerns experiences along the shores of Kuskokwim Bay. He was assigned to the Bethel area in 1931, and there are intermittent comments of historical or ethnographic interest. There is mention of moving the Bethel mission when the riverbank was caving away (pp. 98–101), the problems of understanding the Kuskokwim Eskimo language and making Biblical translations (pp. 135–40), and general conditions at Bethel (pp. 141–43).

138. —A brief history of Bethel. Bethel, 1942? (mimeographed).

The text is a highly informative account of changes at Bethel from 1885 through 1942. Included is information on such topics as: the founding of the Moravian Mission, trading establishments, schools, reindeer, supply routes and means, epidemics, mining, and relocating the community. A mimeographed reproduction of the original publication was prepared by the Department of Anthropology, University of California, Los Angeles, in 1963.

139. Eakin, Henry M. The Iditarod-Ruby region, Alaska. U.S. Geological Survey Bulletin 578, 1914.

Casual remarks upon Kuskokwim geography but a good Kuskokwim map.

- 140. Eells, Walter Crosby. Educational achievement of the native races of Alaska. Journal of Applied Psychology, 1933, v. 18, no. 6, pp. 646–70. "The entire test program, both of fundamental abilities as reported in the writer's earlier papers, and of achievement, as summarized in the present article, offers convincing evidence that the present curriculum is not at all satisfactorily adjusted to the capacity of the natives. It shows that the present program is decidedly wasteful of the time of the pupils, of the money of the government, and of the efforts of the teachers."
- 141. —Mechanical, physical and musical ability of the native races of Alaska. Journal of Applied Psychology, 1933, v. 17, no. 5, pp. 493–506. MacQuarrie test for mechanical ability, brace scale of motor ability, Sneller chart for vision, a whispering test for keepness of hearing and the Seashore measures of musical talent. Findings are reported in the volume titled Alaska natives later published by Anderson and Eells.
- 142. —Mental ability of the native races of Alaska. Journal of Applied Psychology, 1933, v. 17, no. 4, pp. 417–38.

Test of Eskimo, Aleut, and Indian children on the Stanford-Binet and Goodenough scales. No specific mention of the Kuskokwim, but children were included as evidenced by the later published findings in Anderson and Eells' volume titled Alaska natives.

- 143. Elliott, Henry W. Our Arctic province. New York, 1886.
 Elliott discusses Kuskokwim geography and says something of the people, particularly with reference to subsistence activities. His descriptions apparently are based upon secondary sources.
- 144. —A report upon the condition of affairs in the territory of Alaska. Washington, D.C., 1875.
 - The "Kuskoquims" of Kuskokwim bay and river are regarded as speakers of the "Kodiak Tongue" (p. 29). The Kuskokwim trade is mentioned briefly as centering at Kolmakov Redoubt. The traders descended the river in June to receive their inventory from ships at the mouth. The primary fur animals taken were beaver, red fox, mink, marten, brown and black bear (pp. 47–48). A summary of Kuskokwim fur takes from Russian-American Co. records between 1842 and 1861 is presented (pp. 49, 52). In an appendix the 1834 Bishop Veniaminov population figure for the "Koskoquim" is given as 7,000 (p. 227), while the Tikhmenev 1863 census of Kuskokwim Christians is given as 755 males and 640 females for a total of 1,395 (p. 228).
- 145. Erman, A. On the trip and discoveries of Lieutenant L. Zagoskin in Russian America. (translated title). Archive for Scientific Research,

- 1847–48, v. 6, pp. 499–522, 613–72; 1848–49, v. 7, pp. 429–80. Excerpts of Zagoskin's original publications of his travels in Russian America.
- 146. Eskimo, The. (v. 1-2; 1916-18, published in Nome: v. 3-7; 1936-40, published in Seattle: v. 8-14; 1941-47, published in Eugene).

The Eskimo is devoted to activities centering about the reindeer industry. There are statistics on Kuskokwim herds in: v. 6, no. 4; v. 9, no. 1; v. 12, no. 1; and v. 14, no. 1.

Evans, A. N. See U.S. Bureau of Education.

147. Executive order. President T. Roosevelt's executive order, reserving lands for educational purposes at . . . Bethel, Quinhagak . . . Executive Order No. 626. Washington, D.C., May 4, 1907.

Certain described lands in Alaska reserved for educational purposes pending survey and segregation by the General Land Office.

148. —President Wilson's executive order, reserving certain lands in Alaska on Kuskokwim and Yukon rivers . . ., for use of the Bureau of Education and the natives of Alaska. Executive Order No. 2757. Washington, D.C., Nov. 22, 1917.

Akiak, Mountain Village, and Tatitlek Reserves, Alaska, established for use of the Education Bureau and of natives of indigenous Alaskan race.

- 149. Farthest northern collegian. College secures old blockhouse of Russian days. Farthest North Collegian, 1930, v. 7, no. 5, pp. 1, 8.
 - Mr. A. Walsh of Crooked Creek dismantled the blockhouse at Kolmakov Redoubt and shipped it to the University of Alaska. The structure is octagonal with four rifle ports and a door. The floor was decayed and could not be shipped. The article continues with quotations about Russian activities on the Kuskokwim from Bancroft and Elliott. According to Walsh the building is the oldest on the river and was called Luke's Fort. It "first stood on the other side of the river from Hoffman's halfway between Hoffman's and Kolmakovsky." Walsh states additionally that "Creole Luke" (Lukin?) was murdered at the fort, and it was torn down by the Indians, only later to be rebuilt at Kolmakov.
- 150. Federal Indian law. Washington, D.C., 1958.

The section on Alaskan natives (pp. 927–64) is the best published summary of Alaskan Eskimo and Indian legal status. No specifics concerning the Kuskokwim are included; however, it would be impossible to consider seriously state and Federal attitudes toward aboriginal Alaskans without consulting this work.

151. Fiscus, Clifford H. Salmon racial sampling in the areas north of Bristol Bay-1956. Pacific Salmon Investigations, Fish and Wildlife Service, Sept., 1956 (dittoed report). The 1956 salmon run on the Kuskokwim is discussed with reference to when the particular species runs began, intensified, and fell off. The species included are the kings (O. tskawytscha), chums [dogs], reds (O. nerka), pinks (O. gorbuscha), and silvers (O. kisutch). There also are remarks about lampreys and the sheefish run.

152. Foote, Don C. and Sheila K. Macbain. A selected regional bibliography for human geographical studies. Geography Department Publication, McGill University, 1964, no. 12 (offset printing).

The full title of this study is: A selected regional bibliography for human geographical studies of the native populations in central Alaska. The information is divided into "Research Regions," four of which include portions of the Kuskokwim River. The listing of villages by ethnic groups is incorrect and misleading since contemporary Eskimo settlements are listed as Indian and vice versa.

153. Fournelle, Harold J. Experience with the laboratory diagnosis of enteric diseases in Alaska. American Journal of Medical Technology, 1956, v. 22, no. 6a, pp. 36–43.

A lower Kuskokwim River study of diarrhea among the Eskimos to establish its prevalence, the age groups involved, the time of occurrence and the agents involved. The agent isolated has been *Shigella flexneri*; the age group, children 10 years of age or under. Dogs have not been found as important carriers of bacterial pathogens; 38% of the people had a history of diarrhea, and diarrhea was most common in July and August.

154. Fournelle, Harold J. et al. A bacteriological and parasitological survey of enteric infections in an Alaskan Eskimo area. American Journal of Public Health, 1958, v. 48, no. 11, pp. 1489–97.

Study of enteric infections among the lower Kuskokwim River Eskimos during 1955–56. A history of diarrhea among persons interviewed indicated the greatest prevalence in July and August. Children from 0–9 years of age accounted for 67.2% of the cases. "Except for three isolations of Salmonella typhosa, no other salmonelleae were found. Two pathogenic Escherichia coli types were isolated from four young children . . . Only one bacterial pathogen was isolated from 278 fecal specimens of dogs. Of the human parasitic infections, Endamoeba coli and Diphyllobothrium sp. were most numerous."

155. —Seasonal study of enteric infections in Alaskan Eskimos. Public Health Reports, 1959, v. 74, no. 1, pp. 55–59.

The communities of Oscarville and Napaskiak were selected for a yearlong study of diarrhea and parasitic infections by season, age, and sex. Of the 174 Eskimos, 88 (50.6%) had a history of diarrhea for some time during the course of the study, and most cases were reported in July and August. Children under 10 years of age

represented 62.0% of the cases. Shigella flexneri 2a was the bacterial pathogen isolated from 3 persons. Parasitic infections average 77.0% of the people parasitized and were from all age groups. Endamoeba coli, Endolimax nana, and Diphyllobothrium sp. were the most numerous.

156. Gabrielson, Ira N. Alaskan waterfowl and their management. Science in Alaska, 1950. (no place of publ.), 1952, pp. 292–305.

The Kuskokwim River area is mentioned briefly with reference to the breeding areas for crackling and white-fronted geese (p. 296).

157. Gapp, Samuel H. Kolerat pitsiulret or True stories of the early days of the Moravian mission on the Kuskokwim. Bethlehem, 1936.

A popularized sketch of John Henry Kilbuck's early life is presented, then his service on the Kuskokwim as a Moravian missionary and governmental employee is summarized. Extracts of Mrs. Kilbuck's diaries and "other writings" are included, along with Kuskokwim experience of the missionaries John Hinz, Samuel Rock, and Joseph Romig.

158. —Where polar ice begins or The Moravian mission in Alaska. Bethlehem, 1928.

A brief introduction on the history of Alaska, its climate, and resources, is followed by a discussion of Moravian Church mission activities. The discussions of the Eskimos of the Kuskokwim are of limited value since the author draws information from diverse Eskimo groups and implies that it applies to the sphere of Moravian influence.

159. Garber, Clark M. Eskimo infanticide. Scientific Monthly, 1947, v. 64, no. 2, pp. 98–102.

Brief mention of Kuskokwim Eskimo step-daughter mating, an infant born of the union, and the demise of the infant.

160. —Marriage and sex customs of the Western Eskimos. Scientific Monthly, Sept. 1935, v. 41, pp. 215-27.

This discussion has some references to the Kuskokwim Eskimos, but the statements in general are not tied to any particular area or specific communities.

161. —Some mortuary customs of the Western Alaska Eskimos. Scientific Monthly, Sept. 1934, v. 39, pp. 203–20.

The mortuary customs discussed are for Alaskan Eskimos in general so that it is usually impossible to separate the information by region. There are, however, descriptions of a Kuskokwim River mouth and a lower Kuskokwim River cemetery as well as photographs of burials along the river.

162. Gilbert, Charles H. and Henry O'Malley. Investigation of the salmon fisheries of the Yukon River. Alaska fishery and fur-seal industries in 1920, Bureau of Fisheries Document 909, 1921, pp. 128–54.

Mention is made of the Kuskokwim River and possible sockeye salmon run (p. 129). Discusses Yukon River fish wheels but not those on

the Kuskokwim.

163. Glanz, Rudolf. The Jews in American Alaska (1867–1880). New York, 1953.

There are no specific references to the Kuskokwim River area, but there is a discussion of the commercial companies that operated on the Kuskokwim, the Russian-American Co., Hutchinson, Kohl & Co., and the Alaska Commercial Co.

164. Golder, Frank A. Guide to materials for American history in Russian archives. Washington, D.C., 1917.

There is a single map reference to the Kuskokwim that is important (p. 134).

165. Goldstein, Marcus S. Caries and attrition in the molar teeth of the Eskimo mandible. American Journal of Physical Anthropology, 1932, v. 16, no. 4, pp. 421–30.

One group of Kuskokwim River Eskimo mandibles is included in the Eskimo series (p. 426). Summarily, 6.6% of Eskimos were affected with carious molars, and the incidence was greater in the Eskimos of the south and midwest than in the Eskimos of the northwest, north, and northeast.

- 166. Gordon, George Byron. In the Alaskan wilderness. Philadephia, 1917. In 1907 G. B. Gordon and his brother portaged from the Yukon drainage to the Kuskokwim at Lake Minchumina and descended the Kuskokwim to Bethel. He records a few upper Kuskokwim Indian traits (pp. 100–05), those of the Eskimos at Sikmiut (Sleetmiut) (pp. 112–17) and some for the lower Kuskokwim (pp. 136–39). He then generalizes about the Kuskowagmiut (pp. 208–28), giving mostly material culture items. Gordon's discussion of the Kuskowagmiut would be more useful if one could be certain that he has not drawn some of his inventory from the Bering Sea coast cultural inventory of Nelson.
- 167. Gordon, John E. and Frank L. Babbott. Acute intestinal infection in Alaska. Public Health Reports, 1959, v. 74, no. 1, pp. 49–54.

 Included in the sample were the Kuskokwim communities of Bethel, Napaskiak, and Kwethluk in 1954–55. The study established "acute diarrheal disease to be common, especially among infants and preschool children. Incidence was greatest in summer. A variety of pathogenic bacteria were isolated from cases and carriers, with Shigella flexneri 2a and 3 in greatest frequency. Transmission of intestinal infection in sporadic cases, in family groupings, and in small outbreaks was mainly by person-to-person contact."

Governor of Alaska, report of. See U.S. Secretary of the Interior annual report.

168. Gruening, Ernest. The state of Alaska. New York, 1954.

Gruening has virtually nothing about the Kuskokwim in particular, but his chapter, Native claims: equality versus wardship, is one of the few meaningful general statements on modern Alaskan natives.

169. Hallock, Charles. Two hundred miles up the Kuskokwim. National Geographic Magazine, 1898, v. 9, no. 3, pp. 85–92.

This article is an account of the 1884 trip up the Kuskokwim River by the Moravian missionaries Hartmann and Weinland. There are comments upon the geography, the settlements, and the people. It is reported incorrectly (p. 86) that the Moravians located their mission at Kolmakov.

170. Hamilton, John Taylor. The beginnings of the Moravian mission in Alaska. Bethlehem, 1890.

A very good summary of Moravian Church history on the Kuskokwim up to 1890, including a statement concerning the conceptual beginnings of the Alaska mission work.

171. —A history of the church known as the Moravian Church. Bethlehem, 1900.

Contains a chapter (pp. 540-47) on the founding of the Moravian mission in Alaska.

172. —Report of the official visit of Bishop J. Taylor Hamilton to the missions in Southern California and Alaska. Bethlehem, 1906.

This report was also published in the Moravian Church Proceedings for the Year 1905. It is a general discussion of Alaskan mission history, problems and conditions.

- 173. Hammerich, Louis Leonor. Russian loan-words in Alaska. Thirtieth International Congress of Americanists, London, no date, pp. 114–26.

 Included are words taken from the Kuskokwim Eskimo grammar and vocabulary by Hinz and an 1896 Kuskokwim Eskimo liturgy published in San Francisco.
- 174. —The Russian stratum in Alaska Eskimo. Slavic Word, 1954, v. 10, no. 4, pp. 401–28.

Drawing upon the Yuk vocabularies of Barnum, Hinz and the Eskimo liturgy in the Kuskokwim language, plus his own Sleitmiut (Sleetmiut) lists, Hammerich compiled a list of Russian loanwords to be found in Yuk.

175. —The Western Eskimo dialects. Thirty-second International Congress of Americanists, Copenhagen, 1958, pp. 632–39.

The dialects of Western Eskimo are divided into 10 geographical regions and 3 major dialect divisions. Comments are also made on loanwords as well as a brief characterization of the dialect groups.

Hartmann, J. A. See U.S. Bureau of Education.

176. Heller, Christine A. Edible and poisonous plants of Alaska. University of Alaska, 1953 (mimeographed).

Specific Kuskokwim plant references are few. Included, however, are the Kuskokwim Eskimo names for certain plants (pp. 53, 93, 103, 109, 129, 131, 135) as well as Kuskokwim uses (pp. 29, 53, 129, 131, 135), and mention of the deaths of two Bethel children from eating the roots of poison water hemlock (p. 153).

177. Herron, Joseph S. Explorations in Alaska, 1899, for an all-American overland route from Cook Inlet, Pacific Ocean, to the Yukon. War Department, Adjutant General's Office, No. 31. Washington, D.C., March 1901.

This U.S. Army expedition traveled from Cook Inlet to the Yukon River and touched the upper Kuskokwim drainage. Included is a short vocabulary for upper Kuskokwim Indians (p. 72) but very little other specific information about the river.

178. Hetzel, Theodore B. Indian rights and wrongs in Alaska. Indian Truth, 1961, v. 38, no. 2, pp. 1–8.

A general history and summary of the problems of aboriginal peoples in Alaska. One photograph is included of Upper Kalskag Eskimos.

- 179. Himmelheber, Hans. Eskimo artist (translated title). Eisenach, 1953. During the early part of the summer of 1936 Himmelheber visited the lower Kuskokwim and then after a trip to the more northerly Alaskan coastal settlements spent the winter on Nunivak Island. Himmelheber described the role of the artist in southwestern Alaskan Eskimo society. He was concerned with what the artist creates, his ideas about the creations, and his personality. This book is unquestionably the best study of Eskimo artists in Alaska.
- 180. —The frozen path (translated title). Eisenach, 1951.

 This volume contains mythology and storyknife tales of the Nunivak Island and lower Kuskokwim River Eskimos. The majority of the tales are from Nunivak Island, but a few are for the Kuskokwim (pp. 101–03; 113–15; 116–17).

Hinckley, F. C. See Spurr, Josiah Edward.

181. Hinz, John. Grammar and vocabulary of the Eskimo language. Green Bay, 1944.

The best existing grammer and vocabulary of the Yuk dialect of Eskimo. The work was accomplished among the Eskimos of the Kuskokwim River.

- 182. —The Passion Week manual (in Kuskokwim Eskimo). Herrnhut, 1915.
- 183. Hitchcock, Dorothy J. Parasitological study of the Eskimos in the Bethel area of Alaska. Journal of Parasitology, 1950, v. 36, no. 3, pp.

232-34.

Bethel area Eskimos numbering 192 in all were examined, and a summary of the findings is as follows: "I. The incidence of the intestinal protozoa in the Eskimos of the Bethel area is similar to that of the general population in the northern United States. 2. Diphyllobrothrium sp. was observed in 15% of the population examined. 3. Enterobius vermicularis occurred in 58% of the people, being most common in the age group 21–70 years. 4. Mixed intestinal parasite infections occurred in 39% of the people. 5. The intradermal trichina skin test showed 6.6% of the population to be reactors."

184. Hoare, J. M. and W. L. Coonrad. Preliminary report on geologic investigations in the lower Kuskokwim region, Alaska. Science in Alaska, 1954. Fairbanks, 1954, p. 52.

The lower Kuskokwim region geologic formations range in age from pre-Cambrian (?) to late Tertiary (?), and most of them are marine. Intrusive rocks are widespread with a wide variety of represented types. No historical or anthropological information included.

185. Hoffman, Bernard G. A daily journal kept by the Rev. Father Juvenal, one of the earliest missionaries to Alaska. Kroeber Anthropological Society Papers, 1952, no. 6, pp. 26–59.

There are a bibliographic introduction, the translation which was probably by Ivan Petroff, and endnotes. There is only one mention of the Kuskokwim. This was with reference to persons from there who came to the Iliamna area where Juvenal was working. This is the earliest known Kuskokwim reference and dates from 1796.

186. Hong, Joseph S. The remote dwelling program of the Alaska Housing Authority. Science in Alaska, 1955 and 1956. (no place or date of publ.), pp. 146–47.

Under a congressional act of 1949, a million dollar revolving fund for a remote dwelling program for housing improvement was established. Some 700 loans had been made by 1952, and one of the areas served was the Kuskokwim.

187. Hosley, Edward H. The McGrath Ingalik. Anthropological Papers of the University of Alaska, 1961, v. 9, no. 2, pp. 93–113.

The settlements occupied by the Kuskokwim Ingalik are recorded as of 1960, and the prior distribution of the people is summarized. The aboriginal and present sociocultural systems are summarized, and concluding remarks are confined primarily to the shifting ethnic boundaries. This is the only published study of the Kuskokwim Ingalik.

188. Hrdlička, Aleš. Alaska diary, 1926–1931. Lancaster, 1943.

One part of this book is devoted to the Kuskokwim River region (pp. 257–340) and Hrdlička's trip there in 1930. He crossed the portage from the Yukon and went downstream to Bethel and then on to the vicinity of Lomohavik (Lomavik) and back to Bethel. He

ascended the river to the vicinity of Stony River junction and then went back to Bethel and across the portage to the Yukon River. The text is a running account of the problems in gathering skeletal material, the bothersome mosquitoes, and observations concerning the people.

189. —Anthropological survey in Alaska. Forty-Sixth Annual Report of the Bureau of American Ethnology. Washington, D.C., 1930, pp. 19–374.

The locations of sites and occupied villages on the lower Kuskokwim are noted (pp. 191–93) in addition to a summary of Russian explorations along the river (pp. 126–28). There is very little useful Kuskokwim information in this volume.

190. —Anthropological work in Alaska. Smithsonian Institution, Explorations and field-work of the Smithsonian Institution in 1931, Publ. No. 3134. Washington, D.C., 1932, pp. 91–102.

During this season Hrdlička did not work on the Kuskokwim, but he mentions the river and the people there in general comments about southwestern Alaska.

191. —Anthropological work on the Kuskokwim River, Alaska. Smithsonian Institution, Explorations and field-work of the Smithsonian Institution in 1930, Publ. No. 3111. Washington, D.C., 1931, pp. 123–34.

A general discussion of Hrdlicka's trip to the Kuskokwim area in 1930 followed by a consideration on the distribution of Kuskokwim ethnic groups, the racial types, and skeletal remains.

192. —The Eskimo of the Kuskokwim. American Journal of Physical Anthropology, 1933, v. 18, no. 1, pp. 93–146.

This article contains casual remarks on Kuskokwim River history and the movements of people, along with the presentation of somatological data gathered by Hrdlička in 1930 among Eskimos and Indians. These observations are then compared with other Western Eskimos.

193. —Fecundity of Eskimo women. American Journal of Physical Anthropology, 1936, v. 22, no. 1, pp. 91-95.

Inquiry by a Bethel area nurse, of the number of children by fecund women who were past childbearing age. The sample was from all along the Kuskokwim River and adjacent estuary areas. Twenty-seven women bore 168 children (mean 6.2), of whom 62 (2.3 mean) were living and 106 (3.9 mean) were dead.

194. —Height and weight of Eskimo children. American Journal of Physical Anthropology, 1941, v. 28, no. 3, pp. 331-41.

A series of growth measurements of Bethel area school children for as many as 5 years. The growth trends are the same as for the white control group.

195. —Puberty in Eskimo girls. Proceedings of the National Academy of Sciences, 1936, v. 22, no. 6, pp. 355-57.

Menstruation records for sixteen full-blooded Eskimo girls in the

Bethel school during 1930 and for 6 girls of mixed Eskimo and white ancestry. The mean age for the menarche of Eskimo group was 13.3+ years, while the mixed group was 13.2+.

196. Jackson, Harriet. Tundra practice: present and future. Alaska Medicine, 1959, v. 1, no. 4, pp. 118–19.

Dr. Jackson reports on starting the first private practice in the Kuskokwim River area during July, 1959. The practice was established to provide care for those natives not interested in treatment at the U.S. Public Health Service hospital in Bethel and those not eligible for this care. Mentions also that she was elected mayor of Bethel in the fall of 1959.

197. —Work on EENT project continues in seven villages in McGrath area. Alaska's Health, Aug. 1959, v. 16, pp. 1–2.

The EENT Demonstration Project focused at McGrath began in July, 1957, and its purpose was to "lower the incidence of upper respiratory infection." Among the Kuskokwim villages involved were Aniak, Kalskag, and Crooked Creek. See Alaska Department of Health and Welfare. The McGrath project.

Jackson, Sheldon. Annual report on introduction of domestic reindeer into Alaska. 1st-16th, 1890–1906. Washington, D.C., 1891–1908.

- 198. 1896. Contains a letter from a Moravian Church official approving the idea of the introduction of reindeer into Moravian Church territory in Alaska (pp. 122–23) and a letter from the Moravian missionaries Romig and Rock to Jackson requesting reindeer for the Kuskokwim (pp. 131–32).
- 199. 1899. Mention of the Moravian mission station at Bethel and Ugaviq (Ogavik) in a statistical table, also the Roman Catholic mission at Ihkamute (Ohagamiut) (p. 60).
- 200. 1900. Included is a letter from the Moravian missionary Romig (pp. 147–48) concerning reindeer for the Kuskokwim.

 1901. Included is a report on the Moravian mission reindeer herd (pp. 10–11) and the annual report of the Moravian Mission reindeer station (pp. 84–86).
- 201. 1902. The report contains a paragraph (p. 15) on the Bethel herd; the annual report of the Bethel reindeer station by Stecker (pp. 93-95); the transfer of Lapp herds to the Kuskokwim (p. 96); and the transfer of Eaton reindeer to the Kuskokwim (pp. 137-39).
- 202. 1903. Report of the Kuskokwim herd (pp. 14-15); herd statistics (p. 17); and the annual report of the Bethel station (pp. 104-09).
- 203. 1904. The report contains a summary of Kuskokwim herds (p. 22); the Bethel station (pp. 25–26); annual report of the Bethel reindeer station (p. 115); extracts from a journal kept from Unalakleet to Bethel and return (pp. 54–77).

- 204. 1905. The report contains statistics on the Kuskokwim herds (pp. 10–13); comments on the Bethel station (pp. 16–17); an account of a trip from the Kuskokwim valley to Iliamna (pp. 160–63); and the annual report of reindeer, Moravian mission (pp. 68–70).
 - -See also U.S. Bureau of Education.
- 205. Jacobsen, J. A. Life and activity of the Eskimo (translated title). Austland, 1891, v. 64, pp. 593-98, 636-39, 656-58.

The Kuskokwim references are few and unimportant. Mention is made of the muskrat and squirrel skin parkas of the Yukon, Kuskokwim, and Nushagak Eskimos; a comment on Yukon and Kuskokwim labrets; wooden dolls attached to the rear of the parkas of young girls; and the double burial boxes of the Kuskokwim and Yukon Eskimos which were raised off the ground and painted with scenes from the individual's life.

206. Jenness, Diamond. Eskimo administration: I. Alaska. Arctic Institute of North America, Technical Paper no. 10 (no place of publ.), 1962.

This is the only general discussion of Alaskan Eskimo administration, but unfortunately it does not include the period of Russian administration. At the same time it is very weak in the treatment of southwestern Alaska, and many key topics are ignored completely. Specific Kuskokwim references are few.

Johnson, Walter H. See U.S. Bureau of Education.

Juvenal, Hieromonk. See Hoffman, Bernard G.

Kalbach, L. A. See U.S. Bureau of Education.

207. Karshan, Maxwell, Theodor Rosebury and L. M. Waugh. Dental caries among Eskimos of the Kuskokwim area of Alaska. American Journal of Diseases of Children, 1939, v. 57, no. 5, pp. 1026–34.

The discussion is of "biochemical characteristics of stimulated saliva correlated with dental caries and occurrence of salivary calculus." This is the second part of the 1936 Bethel area study; the previous article appeared in the same journal under the senior authorship of Theodor Rosebury. The stimulated saliva of 49 Eskimos free from dental caries resulted in higher average values for total calcium content, inorganic phosphate content, carbon dioxide capacity and other measures when compared with the group with active caries (sample 36). "These findings thus confirm the previously reported indication that certain salivary characteristics, presumably related to the power of saliva to prevent the solution of dental enamel by acids, are correlated in group averages with the occurrence of dental caries."

208. Karshan, Maxwell et al. Biochemical studies of the saliva of Eskimos. American Journal of Diseases of Children, 1940, v. 59, no. 1, pp. 39–44.

The sample included Eskimo children from Hooper Bay Village, Kepnuk (Kipnuk), and the Moravian Orphanage at Nunapitsinghak on the Kwethluk River. The study was conducted to determine the salivary characteristics of individuals with and without dental caries when the saliva is unstimulated or stimulated. The results were that "higher mean values for total calcium, inorganic phosphate and carbon dioxide capacity were found in a caries-free group than in a group with caries."

Kilbuck, J. H. See U.S. Bureau of Education.

209. Kitchener, Lois D. Flag over the north, the story of the Northern Commercial Company. Seattle, 1954.

One chapter, Trade along the Kuskokwim (pp. 161–86), contains an adequate, but not always accurate, account of Hutchinson, Kohl & Co., Alaska Commercial Co., and Northern Commercial Co. trading activities.

210. Knoll, Clara Galbraith. We teach at Crooked Creek. Alaska Sportsman, 1959, v. 25, no. 7, pp. 12–15, 42–43.

The village of Crooked Creek, located along the central Kuskokwim, is discussed in an informal manner by a teacher who taught there. The problems of teaching the children, maintaining the physical plant, and adjusting to a relatively isolated life are considered briefly.

211. Kusko times, The.

A newspaper issued on Wednesday and Saturday of each week at McGrath. V. 1, no. 50, was published July 16, 1921.

212. de Laguna, Frederica. The prehistory of northern North America as seen from the Yukon. Society for American Archaeology Memoir no. 3. Menasha, 1947.

The problem of the ethnic affinities of the Kuskokwim Eskimos and Indians as discussed with particular reference to the writings of Dall, Zagoskin, and Osgood. There are also some descriptions of specific traits found on the Kuskokwim, but the comments are not very meaningful since little comparative data is available.

Lamar, L. Q. C. See U.S. Bureau of Education.

Lamb, Frank W. See U.S. Bureau of Education.

213. Lantis, Margaret. Alaskan Eskimo ceremonialism. New York, 1947.

This volume is the definitive descriptive and analytical study of Western Eskimo supernaturalism. Comparatively little information is presented dealing with the Kuskokwim, since little was available, but the information from E. W. Nelson, L. A. Zagoskin, H. Himmelheber, and F. P. Wrangell, is utilized.

- 214. —Alaskan Eskimo cultural values. Polar Notes, 1959, no. 1, pp. 35–48. Lantis attempts to generalize about the value system of western Alaskan Eskimos from Point Hope to the Kuskokwim River mouth. The Kuskokwim River Eskimos are not dealt with, but many of the generalizations may logically be applied to them.
- 215. —Folk medicine and hygiene, lower Kuskokwim and Nunivak-Nelson island areas. Anthropological Papers of the University of Alaska, 1959, v. 8, no. 1, pp. 1–75.

This study is the most comprehensive treatment of Eskimo concepts of health and disease. Among the topics discussed are forms of medication and curing ideas, a section on childrearing practices, disease prevention, and current concepts regarding disease and death. One appendix includes medicinal plants, while others include statistical tables on diseases and deaths. Most of the information was not derived from Kuskokwim River Eskimos but from the Kuskokwim Bay-Nunivak Island region.

216. —Present status of the Alaskan Eskimos. Science in Alaska, 1950. (no place of publ.), 1952, pp. 38-51.

The Kuskokwim is briefly mentioned in connection with: the Moravian mission (p. 41); the muskrat take (p. 42); and as an area where there is no archaeology (p. 50).

217. —Problems of human ecology in the North American arctic. Arctic, 1954, v. 3, nos. 3-4, pp. 307-320.

This paper is a summary of sections of the release written for the Arctic-Desert-Tropic Information Center. The Kuskokwim mentions are few, but the article is a fine summary of problems in arctic ecology.

218. —The reindeer industry in Alaska. Arctic, 1950, v. 3, no. 1, pp. 27–44.

This paper is the definitive study of the Alaskan reindeer program from 1892 to 1949. While there is very little specific information on the Kuskokwim reindeer herds, they are mentioned. However, the Kuskokwim reindeer industry was relatively unimportant considering Alaska as a whole.

219. —Research on human ecology of the American Arctic. Arctic-Desert-Tropic Information Center. 1954 (mimeographed).

Included in this general study of human ecology is information drawn from both archaeological and ethnographic sources. Lantis has assembled the most pertinent analysis of this type released to date, and while the Kuskokwim is mentioned only rarely (pp. 35, 55, 64, 81, and 100) many of the generalizations made apply to southwestern Alaska.

220. —Traditional home doctoring and sanitation, lower Kuskokwim valley, Nelson and Nunivak islands. Science in Alaska, 1958. (no place or date of publ.), pp. 132–50.

The only information for the Kuskokwim River proper was collected

at the village of Eek. However, probably most of the generalizations would apply to the Kuskokwim Eskimos. Most of the information contained in this article was expanded upon by Lantis in Anthropological Papers of the University of Alaska, v. 8, no. 1. Remarks on the adaptability of the people to modern medical practices are particularly insightful.

221. Latham, Robert Gordon. The native races of the Russian empire. London, 1854.

It is mentioned only that the Eskimos occupy the lower course of the Kuskokwim River, and there is a comment that the Tshugatsi are like the Kuskutshevak.

222. —On the ethnography of Russian-America. Opuscula, essays chiefly philological and ethnographical. London, 1860, pp. 266-74.

The only Kuskokwim information is included in a single paragraph giving the general distribution, population, and a little about the kashgee complex.

223. Laughlin, William S. Blood groups, morphology and population size of the Eskimos. Cold Spring Harbor Symposia on Quantitative Biology, 1950, v. 15, pp. 165-73.

Included among the blood group samples is an Alaskan Eskimo series from Bethel as well as comments on Hrdlička's characterization of the physical type of Kuskokwim Eskimos.

224. —Contemporary problems in the anthropology of southeastern Alaska. Science in Alaska, 1950. (no place of publ.), 1952, pp. 66–84.

A summary of Yupik distributions is presented, comments on Kuskokwim Eskimo blood types, and the roundheaded nature of the Kuskokwim people.

225. Lear, Louise. Chemotherapy in Alaska. American Journal of Nursing, 1957, v. \$7, no. 3, pp. 320–22.

Summary of the chemotherapy program begun in 1954 in Alaska. Problems of a chemotherapy nurse are discussed, the nature of the program, some cultural factors, and general comments upon the Kuskokwim area program.

226. —Eskimo businessman and native leader. Alaskan Quarterly, 1954, v. 7, no. 3, pp. 28–29.

A biographical sketch of the Point Hope Eskimo, Max Lieb, who went to the Kuskokwim and opened a store and roadhouse.

227. —Tundra hospital. American Journal of Nursing, 1955, v. 55, no. 9, pp. 1100–02.

An account of the services offered at the Bethel hospital for the Kuskokwim area Eskimos. The article, written by a nurse working at the hospital, includes the diverse problems of nursing in the area. After the former hospital burned in 1950, a temporary hospital was established in a quonset hut and the ensuing problems are discussed.

Additional comments on tuberculosis and childbirth.

- 228. LeFebre, Charlene Craft. A contribution to the archaeology of the upper Kuskokwim. American Antiquity, 1956, v. 21, no. 3, pp. 268–74. The Hayfield site, between the outlet of Telida Lake and the McKinley fork of the Kuskokwim River, was the first systematic site excavation on the Kuskokwim River. The site is interpreted as a fish camp of recent prehistoric date and most likely representative of Athapaskans. Included among the finds were: microlithic obsidian scrapers and a lamellar flake, splitting adzes, boulder chip scrapers, ulu blades, grooved stone net sinkers, projectile points, awls, and pottery.
- 229. Leonty, Rt. Reverend. An outline of the history of the Orthodox Church in America. Russian Orthodox Journal, 1943–45, vols. 16–19, (scattered through these volumes in installments).

Probably the best history of the Russian Orthodox Church in America thus far published in English. There is, however, only brief mention of the Kuskokwim.

230. Literary digest. Alaska's river of opportunity. Literary Digest, Feb. 20, 1915, v. 50, pp. 363-64.

A brief note that the Kuskokwim River mouth has just been charted. It further notes that the interior waterway extends some 600 miles.

231. Little missionary, The; an illustrated monthly newspaper. Bethlehem, Pennsylvania.

A Moravian Church publication known to contain articles on the Kuskokwim mission activities. The only article dealing with the area for which the date is known is April 1900.

232. Llorente, Segundo. The banks of the 'Kusko'. Bilbao, 1951.

A very brief mention of Kuskokwim geography (p. 17), the Moravian mission (p. 18), the early work of Father Robaut and the fact that Roman Catholic missionary visits have been sporadic (p. 19), mentions only of floods at Bethel in 1911 and 1946 (p. 20). The Bethel mission of the Roman Catholic Church was established in 1942 by Father Francisco Menager to provide services for the 800 soldiers there (p. 21).

233. Lonneux, Marten J. Catholic manual of prayers in Innuit. (no date or place of publ.).

This volume is in Yuk rather than Innuit as linguists use the terms.

234. —The graded catechism in Innuit. Chaneliak, 1951.

This volume is in Yuk.

235. —Mass book and hymnal in Innuit. Chaneliak, 1950. This volume is in Yuk

Lopp, W. T. See U.S. Bureau of Education.

236. Mack, Gerstle. Lewis and Hannah Gerstle. New York, 1953.

This family history includes a good summary of the founding of the Hutchinson, Kohl & Company and the Alaska Commercial Company. Both were incorporated in 1868. In the same year the Alaska Commercial Company bought the Hutchinson, Kohl & Company, but the latter continued to operate independently until the purchase price was paid in full in 1870. The Northern Commercial Company was organized as an Alaska Commercial Company subsidiary in 1902 and sold to a group of employees in 1922. This book contains no specific Kuskokwim information but provides a useful background to Kuskokwim commercialism.

237. Maddren, Alfred Geddes. Gold placer mining developments in the Innoko-Iditarod region. Mineral resources of Alaska, 1910 (U.S. Geological Survey Bulletin 480), 1911, pp. 236–70.

History of mining along the Kuskokwim and Yukon with emphasis on the recent developments.

238. —Gold placers of the lower Kuskokwim with a note on copper in the Russian Mountains. Mineral resources of Alaska, 1914 (U.S. Geological Survey Bulletin 622), 1915, pp. 292–360.

The sketch of historical mineral explorations is very useful (pp. 298–302). Note is made that cinnabar was the first mineral authentically reported from the Kuskokwim; the early gold seekers arriving in 1889; a 1900–01 stampede; the Tuluksak tributary discoveries in 1907–08 and George River-Crooked Creek prospects of 1908–09. There is a brief but useful discussion of the settlements and local river travel (pp. 302–03) which notes that steamboats first frequented the river in 1907.

239. —The Innoko gold-placer district, Alaska, with accounts of the central Kuskokwim valley and the Ruby Creek and Gold Hill placers. U.S. Geological Survey Bulletin 410 (also as House Document 188, 61st Congress, 2nd Session), 1910.

Most of the Kuskokwim River region information has been drawn from the 1900 publication by Spurr but supplemented by Maddren's information. Included is a general geographical description of the Kuskokwim River and a historical sketch of the region which stresses the search for gold. Mention is made of the Tuluksak placer discovery in 1907–08. There are also two pages devoted to recent settlements with the note that Bethel is most important. One extremely useful section is devoted to travel on the Kuskokwim River, including the charting of the river and how the Innoko River gold operations of the Yukon River drainage are reached via the Kuskokwim River.

240. Mahaffey, Joe. Don Block's paradise. Argosy, January, 1956, pp. 34-37, 92-95.

The story of a man who went to Alaska with his son in 1930. They

trapped together somewhere in or near the Stony River drainage through the 1930's. In the early 1940's the father, Don Block, trapped the same area with his Eskimo wife. The account is popular with few noteworthy historical facts.

241. Map of Russian America or Alaska Territory compiled from Russian charts and surveys. San Francisco, 1867.

Most of the Kuskokwim River drainage is included, and for the lower and central course of the river some villages are located.

242. Martin, George C. Gold lodes in the upper Kuskokwim region. Mineral resources of Alaska, 1920 (U.S. Geological Survey Bulletin 722), 1922, pp. 149–61.

On the Nixon Fork streams of Ruby and Hidden creeks, placer mines had been operating for several years (prior to 1919). Shafts were sunk to the bedrock, and "several hundred tons of high-grade ore was mined in the winter of 1919–20." A brief summary of explorations on the Kuskokwim is included along with summaries of the general ecological picture with emphasis on the geology.

243. Mason, J. Alden. Eskimo pictorial art. Museum Journal, 1927, v. 18, no. 3, pp. 248-83.

In this discussion of Alaskan Eskimo graphic art on ivory and antler there are illustrated and described two engraved bow drills from the Kuskokwim River; however, these are probably from the estuary area.

244. Maynard, James E. and Laurel M. Hammes. Infant morbidity and mortality study. Arctic Health Research Center. Anchorage, May, 1964 (mimeographed).

The information included is on a 2-year study of 643 live births in 27 villages in the Bethel area. The study is very comprehensive and probably the best analysis of any segment of the Kuskokwim population.

245. Menager, Francis M. The kingdom of the seal. Chicago, 1962. There is brief mention of an old Kuskokwim River Eskimo woman at Kalskag (pp. 167-71) and a brief biographical sketch of Simeon Sipari (the son of Reinhold Separe, an early American period Kuskokwim River trader) with brief mention of the Kuskokwim (pp.

184–92).

246. Menzel, B. Dans la toundra de L'Alaska. Neychatel, 1938. This is a history of the Moravian missionary work in Alaska between the years 1885 and 1935. This history is quite good and serves as a complement to Dayspring on the Kuskokwim by Schwalbe.

247. Mertie, John Beaver. The occurrence of metalliferous deposits in the Yukon and Kuskokwim regions. Mineral resources of Alaska, 1921 (U.S. Geological Survey Bulletin 739), 1923, pp. 149–65.

The lode deposits of the Kuskokwim are mentioned in brief (pp. 156-57), and the most effective methods of lode prospecting are noted. There is no historical or anthropological information included.

248. Mertie, John Beaver and G. L. Harrington. Mineral resources of the Ruby-Kuskokwim region. Mineral resources of Alaska, 1915 (U.S. Geological Survey Bulletin 642), 1916, pp. 223–66.

The purpose of this paper is to discuss mining in 1915 and the mineral resources of the area involved. Under the heading of Transportation it is noted that one Kuskokwim river boat made three round trips from Bethel to McGrath in 1915. From McGrath freight was carried by gasoline launches up the Takotna River tributary. Gold-bearing gravels were discovered and staked about 1910 and since then, including 1915, mining has been carried out. No other useful historical information is included.

249. —Ruby-Kuskokwim region, Alaska. U.S. Geological Survey Bulletin 754, 1924.

Useful general remarks on Kuskokwim geography introduce the study, and it is stated that about 1917 an Indian settlement was at the base of Joaquin Mountain on the Takotna River and one on the Kuskokwim River at "Sleitmut." Maddren's remarks (in U.S.G.S. Bull. 410) are quoted concerning Kuskokwim mining history, and there are comments on Moore Creek diggings. This paper includes very little information of historical value with reference to the Kuskokwim.

250. Midnight sun, The. Anchorage.

This monthly publication of Northern Consolidated Airlines includes general news items dealing with the Kuskokwim and other sectors of southwestern Alaska: V. 5, no. 5, was released in May, 1956.

251. Mills, William J. and Donald B. Kettelkamp. Kuskokwim medicine. Alaska Medicine, 1961, v. 3, no. 4, pp. 73–76.

The essence of this article is an interview with Mrs. Maggie Lind of Bethel, who was born in 1901. The questions asked and the answers provided are about the nature and means for curing in aboriginal times. Both sacred and secular cures are discussed but only in a superficial manner.

252. Moravian Church, Alaskan collections. Moravian Church Archives. Bethlehem, Pennsylvania.

The holdings of the Moravian Church in their official archives are probably the most important unpublished sources on the Kuskokwim River for the American period. The diaries of John Henry Kilbuck and his wife, manuscripts and letters written by the former, and letters from Mrs. Kilbuck no doubt contain a wealth of ethnographic and historical information. There are, furthermore, the diaries of Joseph H. Romig, Ernest L. Weber, John L. Hinz, and Benjamin Helmich along with other mission records.

253. Moravian Church. Liturgy and hymns in the Eskimo language of the

Kuskokwim district, Alaska, as used by the Moravian Mission. Green Bay, 1945.

Moravian, The. Moravian mission in Alaska, published to commemorate the completion of its first decade. Bethlehem, June 19, 1895 (this supplement was added to the Moravian newspaper, v. 40, no. 2054).

Articles and authors:

- 254. The founder of Protestant missions in Alaska, by the editor, A. L. Oerter, p. 1.
- 255. The tour of exploration of western Alaska, by A. Hartmann, pp. 1–2.
- 256. Notes from Bro. Hartmann's diary (comp. by editor), pp. 2-4.
- 257. Carried in his bosom, by W. H. Weinland, pp. 4-5.
- Ten years of Moravian missionary activity in Alaska, by J. Taylor Hamilton, pp. 5–13.
- 259. The latest intelligence, by J. H. Kilbuck, pp. 13-14.
- 260. The introduction of the domesticated reindeer of Siberia into Alaska by Sheldon Jackson and M. A. Healey (comp. by editor), pp. 14–16.
- 261. —A Christian family newspaper. Bethlehem, Pennsylvania. The following issues are known to contain information on the Kuskokwim Moravian mission: Dec. 24, 1884; Feb. 11, 1885; Mar. 11, 1885; June 3, 1885; Aug. 5, 1885; July 21, 28, 1886; Nov. 3, 10, 17, 1886; Jan. 13, 1932.
- 262. Moyer, T. A. Kuskokwim country and Eskimoland. Alaskan Quarterly, 1954, v. 7, no. 2, p. 35.
 - A casual historical summary of the Kuskokwim River area with comments upon the current conditions.
- 263. Nelson, Edward William. The Eskimo about Bering Strait. Bureau of American Ethnology, 18th Annual Report, pt. 1. Washington, D.C., 1899.

The winter of 1878-79, Nelson traveled from St. Michael to the Kuskokwim River. He ascended the river only a short distance from the estuary. The farthest upriver village from which he bought items of material culture is Kinugumut (Kinagamiut). Thus most of his Kuskowagmiut information applies to the region of the estuary. Nelson's ethnographic collection for the Kuskokwim Eskimos, in spite of its limitations, is the best available.

264. —Report upon natural history collections made in Alaska between the years 1877 and 1881. Arctic Series of Publications issued in connection with the Signal Service, U.S. Army, no. 3. Washington, D.C., 1887.

The collections discussed were made primarily in the northern Bering Sea region of Alaska, but general distributions also are considered. The occurrence of various species on the Kuskokwim are noted. Ethnographic and historical information is not included except for the

Eskimo names of some species.

265. —A sledge journey in the delta of the Yukon, northern Alaska. Proceedings of the Royal Geographic Society, ns., 1882, v. 4, pp. 660–70, map, p. 712.

Beginning in December of 1878 the author traveled from St. Michael to the Yukon River delta and southward to the estuary of the Kuskokwim River. He traveled as far up the river as Kinagamiut where he turned inland and returned to the Yukon River and St. Michael. The fact that Nelson only visited one Kuskokwim community explains why there is so little about the river in his Bureau of American Ethnology report.

266. Okun, Semen Bensionovich. The Russian-American Company (translation by Carl Ginsburg). Cambridge, 1951.

The only comprehensive history of the Russian-American Company published since Tikhmenev's study. The Kuskokwim is not discussed, but insight is provided into general policies and their implementation.

267. Osgood, Cornelius. The distribution of the Northern Athapaskan Indians. Yale University Publications in Anthropology, 1936, no. 7, pp. 1–23.

In this, the definitive study of Northern Athapaskan distributions, Osgood notes that only the Ingalik occupy the Kuskokwim River drainage. This, however, is incorrect. See Oswalt, 1962, Historical populations in western Alaska and migration theory.

268. Osgood, Wilfred H. Lake Clark, a little known Alaskan lake. National Geographic Magazine, 1904, v. 15, no. 8, pp. 326–31.

There is one comment only on the Kuskokwim, and it concerns the portage from Lake Clark to the Kuskokwim River system.

269. Oswalt, Wendell Hillman. Alaskan pottery: a classification and historical reconstruction. American Antiquity, 1955, v. 21, no. 1, pp. 32–43. There is only brief mention of pottery present along the Kuskokwim River, and the one type that is known there, Yukon Line-Dot, bears affinity with adjacent lower Yukon River forms.

270. —Guiding culture change among Alaskan Eskimos. América Indígena, 1961, v. 21, nos. 1, 2, pp. 65–83, 151–70.

The purpose of this study was to provide general information for persons interested in applied anthropology among Western Eskimos. The suggestions focus about the Yuk speakers of the Kuskokwim River drainage and adjacent localities. A historical background is presented, some general observations on Eskimo culture change, fostering innovations at different levels, and currently important issues such as village health, Eskimo relationships with Federal agencies, and resource utilization. The usefulness of this article is severely handicapped by the appalling number of printer's errors.

271. —Historical populations in western Alaska and migration theory. Anthropological Papers of the University of Alaska, 1962, v. 11, no. 1, pp. 1–14.

The aboriginal distribution of Kuskokwim ethnic groups is detailed, and the boundary changes are considered through time. The question of whether a "migration" has occurred is likewise considered.

- 272. —Mission of change in Alaska. San Marino, 1963.

 Published and previously unpublished Moravian missionary accounts of the lower Kuskokwim Eskimos are integrated with Oswalt's lower and central Kuskokwim River ethnographic fieldwork in this study of culture change for the period 1884–1925. This is an analysis of culture change and acculturation with a focus on systemic change in Eskimo religious life. More diverse ethnographic and historical information on the Kuskokwim is presented here than in any other single volume.
- 273. —Napaskiak, an Eskimo village in western Alaska. Arctic Aeromedical Laboratory, Fort Wainwright, Alaska, Technical Report 57-23. Jan., 1961 (mimeographed).

This yearlong study of the Kuskokwim River community of Napaskiak, during 1955–56, utilizes the community study approach to ethnography. Included is a historical discussion of the region; the physical, social and cultural community, with emphasis upon the seasonal round of activities; the Russian Orthodox Church; child rearing; adult life, and the importance of the steam bath among these people.

- 274. —Napaskiak: An Alaskan Eskimo community. Tucson, 1963. This book is a revision of a mimeographed report by the same author prepared for the U.S. Air Force Arctic Aeromedical Laboratory.
- 275. —The new Alaskan Eskimo. Américas, Sept., 1961, pp. 10–13.

 A short, popular account of modern Eskimo life in southwestern Alaska.
- 276. —Preliminary report on Air Force-Eskimo contacts. Alaskan Air Command, Arctic Aeromedical Laboratory, Ladd Air Force Base, Technical Note AAL-TN-56-14. Dec., 1956 (mimeographed).

This report attempts to generalize upon the responses of Yuk-speaking Eskimos to contacts with U.S. Air Force personnel. There are comments upon the different levels of potential interaction, marginal persons, hostility, reliability of verbal information, and Eskimo sociocultural characteristics.

277. —Regional chronologies in spruce of the Kuskokwim River, Alaska. Anthropological Papers of the University of Alaska, 1954, v. 2, no. 2, pp. 203–14.

The study was made to expand upon the number of regional tree ring chronologies of Alaskan spruce and to provide better control in the dating of wood from archaeological sites. The spruce ring records for the Kuskokwim are, however, short and locally variable, which makes use of the derived data difficult.

278. —Traditional storyknife tales of Yuk girls. Proceedings of the American Philosophical Society, 1964, v. 108, no. 4, pp. 310–36.

Forty-one stories told and illustrated by girls from the village of Napaskiak are recorded and discussed. The distribution of the story-knife complex, the associated meanings and functions are briefly considered along with historical changes in the telling of stories.

279. —A Western Eskimo ethnobotany. Anthropological Papers of the University of Alaska, 1957, v. 6, no. 1, pp. 16–36.

This Eskimo ethnobotany was compiled at the community of Napaskiak on the lower Kuskokwim River. The method of data gathering is presented, along with the botanical system of the Napaskiak people and the specific uses or non-use of plants in the local environment.

280. Oswalt, Wendell H., editor. Eskimos and Indians of Western Alaska, 1861–1868: Extracts from the diary of Father Illarion. Anthropological Papers of the University of Alaska, 1960, v. 8, no. 2, pp. 101–18.

The Russian Orthodox Greek Catholic missionary Hieromonk Illarion supplies virtually the only account of the Kuskokwim River Eskimos and Indians during the latter part of Russian occupancy. The Illarion account is largely a spiritual one, but he does offer noteworthy comments upon diverse aspects of Kuskokwim River life, particularly for Kolmakov Redoubt. The diaries are in the Alaska Church Collection of the Library of Congress. A partial translation appears in Documents Relative to the History of Alaska, from which this edited version was derived.

version was derived.
281. Oswalt, Wendell H. and James VanStone. Partially acculturated communities: Canadian Athapaskans and west Alaskan Eskimos. Anthropologica, n.s., 1963, v. 5, no. 1, pp. 23-31.

This article is a comparative study of Chipewyan Indian and western Alaskan Eskimo community organization as represented at the Indian village of Snowdrift and the Eskimo settlement of Napaskiak. Particular attention is paid to the problems of contemporary leadership patterns.

282. Parker, Lauris. Sanitation aide villages stage clean-ups. Alaska's Health, Oct. 1959, v. 16, p. 4.

A brief discussion of the Village Sanitation Aide program. It is noted that for the past three summers stress has been placed on fish camp sanitation along the Kuskokwim, and the situation has been improved according to recent reports from Bethel. It is stated further that the salmon run was good this year.

283. Pathfinder, The. Dr. Joseph Herman Romig. The Pathfinder, 1920, v. 1, no. 7, p. 7.

- A brief biographical sketch of an early Moravian missionary to the Kuskokwim.
- 284. —Edith Margaret Kilbuck. The Pathfinder, 1920, v. 1, no. 7, p. 9.
 A brief biographical sketch of the wife of one of the first Moravian Church missionaries to settle in Alaska.
- 285. —Ella Mae (Ervin) Romig. The Pathfinder, 1920, v. 1, no. 7, p. 8.

 A brief biographical sketch of the wife of a Moravian missionary to the Kuskokwim.
- 286. —John Henry Kilbuck. The Pathfinder, 1920, v. 1, no. 7, p. 9.

 A biographical sketch of one of the first two male Moravian missionaries to work in Alaska. The sketch is quoted from The Moravian, a newspaper published in Bethlehem, Pennsylvania, November 21, 1917.
- 287. —Quicksilver from Kuskokwim. The Pathfinder, 1921, v. 2, no. 10, p.
 - A brief note concerning the DeCourcey Thrift Mining Company taking out forty-five flasks of mercury which marketed at \$45 per flask.
- 288. —Schools and hospitals in Kuskokwim. The Pathfinder, 1922, v. 3, no. 8, p. 16.

A note on opening hospitals and schools in the Kuskokwim area.

- 289. Pauls, Frank P. Enteric diseases. Public Health Reports, 1953, v. 68, no. 5, pp. 531-33.
 - It is mentioned that along the Kuskokwim in 1944 bacillary dysentery was recorded as the cause of death for 97 persons. Typical typhoid outbreaks are discussed, but the Kuskokwim is not mentioned. The Kuskokwim is listed as one of the areas where there had been bacillary dysentery.
- 290. —Enteric diseases in Alaska. Arctic, 1953, v. 6, no. 3, pp. 205–12. Brief mention of the Kuskokwim is included with mention of a 1937 report of 2 deaths from typhoid; 2 cases of Samonellosis in 1948; and 10 cases of typhoid in 1950 resulting in 2 deaths. Bacillary dysentery caused the deaths of 97 individuals, mostly children in the "Kuskokwim area" in 1944. There were other outbreaks in 1947 and 1948, but the number of deaths is not known.
- 291. Pauls, Frank P. et al. Distribution of blood factors among the Eskimos, Indians, and whites of western Alaska. Science in Alaska, 1951. (no place of publ.), 1951, pp. 255–59.

This preliminary report concerns blood sample frequencies in the ABO series for 5,205 specimens. It was noted that Eskimos had the highest frequency of types A, B, and AB, while these frequencies were low in the Indian (Athapaskan) sample. The Eskimos exhibited a complete absence of the A2 gene. For the Kuskokwim and Yukon river areas where Eskimos and Indians are in physical proximity with one another, it was noted that "there has been very little genetic mixture

of the races in the Eskimo-Indian border areas."

292. Petroff, Ivan. Amphibious aborigines of Alaska. Smithsonian Miscellaneous Collections, 1883, v. 25, pp. 33–36.

There is a brief description of the lower Kuskokwim River and adjacent peoples. The description is primarily of hunting, body cleanliness, and dwellings.

293. —Geographical and ethnographical notes on Alaska. Geographical Society of the Pacific, Transactions & Proceedings, July 1891, ser. 1, v. 2, no. 1, pp. 1–15.

The Kuskokwim Eskimos are mentioned in connection with Petroff's account of his travels while collecting information for the 10th Federal census. The information on the Eskimos is more completely provided in his report accompanying the 10th census.

- -See also Hoffman, Bernard G. and U.S. Bureau of Census.
- 294. Phillips, Francis J. A preliminary report on out-patient treatment of pulmonary tuberculosis. Alaska Medicine, 1961, v. 3, no. 1, pp. 1–4.

The Tuberculosis Ambulatory Chemotherapy program is discussed, and its rewarding results set forth. The program was begun in 1955, and in 1956 it came to embrace 72 villages and some 40% of the native population of Alaska. The Arctic Health Research Center of the U.S. Public Health Service was responsible for the program in the "Bethel Triangle," which included most of the Kuskokwim River drainage. In 1951, the death rate in the Bethel Triangle was 847 per 100,000, while the death rate for Alaskan natives in 1958 was 40.5 per 100,000. These are not comparable statistics but demonstrate a striking drop in mortality due largely to the program.

295. Pike, Warburton Mayer. Through the subarctic forest. New York, 1896.

A very casual traveler's account of a trip to Alaska during the summer of 1887. A single chapter deals with the Kuskokwim River from the Yukon portage to the mouth. No useful ethnographic data is included.

296. Polar record. Eskimo scout battalions of the U.S. National Guard. Polar Record, 1954, v. 7, no. 48, p. 210.

In a New York Times article of September 27, 1953, which is summarized, note is made of the formation in 1950 of the Second Scout Battalion of the U.S. National Guard. Headquarters is at Bethel. The program includes volunteers between 17 and 35 years of age, and there are 48 drill sessions plus 15 days of camp a year.

Porter, Robert P. See U.S. Bureau of Census.

297. Porter, Vivian S. et al. Anemia in western Alaska. Science in Alaska, 1953. College, 1956, pp. 217–19.

The report that anemia was common among Eskimos of western

Alaska, particularly around Bethel, was investigated with the conclusion that widespread anemia existed at Kalskag and Savoonga on St. Lawrence Island. The explanation for the anemia seems most likely dietary with the iron intake being marginal.

Post, W. S. See Spurr, Josiah Edward.

298. Price, Weston A. Eskimo and Indian field studies in Alaska and Canada. Journal of the American Dental Association, 1936, v. 23, no. 3, pp. 417–37.

A general study of dental caries and other diseases among Eskimos and Indians. Included in the Eskimo group is information pertaining to the lower Kuskokwim River area. However, the Kuskokwim information cannot be isolated. This article seems quite dated and of very limited utility.

299. Priestley, W. E. The Kuskokwim River-Alaska's neglected highway. Alaska-Yukon Magazine, 1909, v. 8, no. 4, pp. 275-82.

This is a very general account of Kuskokwim geography and resources with very little useful information.

300. Proceedings of the society of the United Brethren for propagating the gospel among the heathen. Bethlehem.

From the time the Kuskokwim mission of the Moravian church was founded, until the proceedings were discontinued in 1948–49, this series was a rich source of detailed information about Moravian activities. There is hardly a year when useful historical or ethnographic information was not published.

Pugh, Eugene V. See U.S. Congress, Interim Report of the Committee on the Judiciary.

301. Rausch, Robert. Animal-borne diseases in Alaska and their public health significance. Fifteenth International Veterinary Congress Proceedings, pt. 1, 1953, v. 2, pp. 1165–71.

There is a brief mention of the Yukon-Kuskokwim region Eskimos being frequently infected with *Diphyllobothrium* sp., but the implications of this cestode's influence on human health are not clear.

302. —Some observations on rabies in Alaska with special reference to wild Canidae. Journal of Wildlife Management, 1958, v. 22, no. 3, pp. 246–60.

An attempt is made to summarize and interpret the information about outbreaks of rabies in canines of Alaska from 1949 to 1957 and consider some of the problems involved. Historically rabies was reported on the Kuskokwim in 1907. A rabid red fox was killed at Kwethluk in 1954, while a rabid dog was killed in Bethel in 1956. In summary, of the 43 cases of canine rabies between 1949 and 1957, the majority were for animals from the tundra area during the colder months; it

was not established that rabies is an important natural control of wild canine populations.

 Ray, Charles K. A program of education for Alaskan natives. (no place of publ.), 1959.

A very good historical survey of Alaskan native education during the American period is followed by a delineation of the purposes of the system. A summary of major problems is presented, as are concluding recommendations. In compiling the field data, questionnaires were sent out, and trips taken to certain schools, including Bethel. Key informants were interviewed, including two teachers from the Kuskokwim River.

Raymond, Charles P. See Carter, Thomas H.

Reed, J. W. See U.S. Bureau of Education.

304. Reeth, H. W. The Kuskokwim River. The Pathfinder of Alaska, 1924, v. 5, no. 10, pp. 7–8.

A very brief account of mining and prospecting along the Kuskokwim. 305. Regulations of the Alaska Board of Fish and Game for commercial fishing in Alaska. Alaska Department of Fish and Game. (no place of publ.), 1964.

The specific regulations for the Kuskokwim River drainage are spelled out in detail. Included are summary statements of the subdivisions, times fish may be taken, the species to be taken and the legal gear for both subsistence and commercial operations.

306. Richardson, John. Arctic searching expedition. New York, 1854.

Contains a summary of Karl E. von Bäer's comments on the "Kuskutchewuk" people who are regarded as primarily coastal and as living between Cape Newenham and Nunivak Island. Included is information about the area occupied, the kashim and its function, ceremonies, yearly round, and social control (pp. 216–19) as well as a vocabulary (pp. 483–96).

307. —The polar regions. Edinburgh, 1861.

Contains only a brief quote, less than a paragraph, from Karl E. von
Bäer about the kashim in "Kuskutchewuk" Eskimo life (pp. 318–19).

308. Robertson, James. Random notes on the Kuskokwim. Alaska-Yukon Magazine, 1911, v. 11, no. 1, pp. 19–22.

A very casual summary of the geography and geology with some mention of commercial activities.

309. Romig, Joseph Herman. Medical practice in western Alaska around 1900. Alaska Medicine, 1962, v. 4, no. 4, pp. 85–87.

This article is a reprint from the Anchorage Daily Times, June 29, 1939. It contains very little specific information about the Kuskokwim apart from the fact that Romig went to Bethel as a medical missionary for the Moravian Church in 1896. Appended to the article is a short

statement by Harriet Jackson Schirmer titled, Dr. J. H. Romig's successors on the Yukon [sic]. It is mentioned that following the residence at Bethel by Romig came Mrs. Herron, who was a public health nurse based at Bethel. It is said further that about 1930 the Alaska Native Service opened a hospital at Akiak but it was closed in 1934. The first hospital at Bethel was opened in 1940, but it burned in 1950, and the new hospital was completed in 1954.

310. —The "Potlatch" of Alaska natives. The Pathfinder of Alaska, 1923, v. 5, no. 2, pp. 1–3.

A good description of reincarnated soul concepts and Eskimo "potlatching" for what is most likely the lower Kuskokwim.

311. Rosebury, Theodor. Dental caries and related mouth conditions among Eskimos of Kuskokwim region, Alaska. Journal of Dental Research, 1937, v. 16, no. 4, pp. 305–06.

"Data indicate caries among Eskimos clinically similar to caries elsewhere; relatively new disease, affecting principally young, apparently directly related in degree to accessibility of natives to white man."

312. Rosebury, Theodor and L. M. Waugh. Dental caries among Eskimos of the Kuskokwim area of Alaska. American Journal of Diseases of Children, 1939, v. 57, no. 4, pp. 871–93.

The clinical and bacteriological findings of a study of dental caries among 124 Eskimos in the Bethel area are reported. The incidence of caries was highest among people who had most intensive contacts with whites, and the disease is recent in origin. Furthermore, "deposits of salivary calculus appear with a frequency in inverse ratio to the incidence of dental caries, to an extent only partly accounted for by differences in age." In the clinical findings of 106 Eskimos, loctobacilli were found in 29 subjects with caries (sample 36), in 6 of the persons free from caries (sample 44), and 11 from persons with doubtful caries (sample 26). The general conclusion is that caries among these Eskimos are like caries in other populations.

313. Rosebury, Theodor and Maxwell Karshan. Dental caries among Eskimos of the Kuskokwim area of Alaska. American Journal of Diseases of Children, 1939, v. 57, no. 6, pp. 1343–62.

The discussion is "a dietary study of three Eskimo settlements" and is the third part of the 1936 Bethel area study. The previous article appeared in the same journal under the senior authorship of Maxwell Karshan. This is a study of the relationship between diet and caries of the Moravian Orphanage at Nunapitsinghak, the isolated coastal community of Kepnuk (Kipnuk), and the lower Kuskokwim river village of Eek. The diet of the Eek and Moravian Orphanage residents is well presented. At Kipnuk there was a great deal of physical isolation, and there were few dental caries. At Eek there was isolation but a resident white trader, and there were many caries. At

the Moravian Orphanage there was white man's food but an intermediate incidence of caries. The dietary factors commonly associated with caries cannot be correlated with the incidence at the three settlements.

314. Ryder, C. J. The Indian fields and work of the American Missionary Association in: Proceedings of the Board of Indian Commissioners at the Fifteenth Lake Mohonk Indian Conference. Annual Report of the Department of the Interior for the fiscal year ended June 30, 1897, Report of the Commissioner of Indian Affairs, pp. 1005–10. Washington, D.C., 1897.

John Taylor Hamilton reported on the work of the Moravian Church along the Kuskokwim and their supply problems (pp. 1007–08).

- 315. Sachet, Octave. La Siberie orientale et l'Amerique Russe. Paris, 1875. A brief description of Kuskokwim explorations and a summary of Zagoskin's Yukon and Kuskokwim travels (pp. 214–25).
- 316. Santos, Angel. Jesuitas en el Polo Norte. Madrid, 1943.

 Brief statements on the Roman Catholic mission on the Kuskokwim River at Ohagamiut founded in 1895–96 and abandoned in 1907.
- 317. Sbornik tserkovnykh piesnopienii i molityoslovii na aglomiutsko-kuskovimskom nariechii. New York, 1896.

The translated title is Collection of church canticles and liturgies in the Anglomut-Kuskokwim dialect.

- 318. Schott, W. On the ethnographic results of the Zagoskin trip (translated title). Archive for Scientific Research. 1848–49, v. 7, pp. 480–512. Eskimo and Athapaskan vocabularies collected by Zagoskin and published in his travel account.
- 319. Schultze, Augustus. A brief grammar and vocabulary of the Eskimo language of northwestern Alaska. Bethlehem, 1889.

A grammar of Kuskokwim Eskimo for missionaries.

320. —Grammer and vocabulary of the Eskimo language of northwestern Alaska, Kuskokwim district. Bethlehem, 1894.

A revision and enlargement of the 1889 grammar by Schultze.

- 321. —Liturgy, hymns and scripture lessons in the Eskimo language of the Kuskokwim district, northwestern Alaska. Bethlehem, 1902; 2nd ed., 1908.
- 322. Schwalbe, Anna Buxbaum. Dayspring on the Kuskokwim. Bethlehem, 1951.

This book is an informal history of the Moravian Church missionary activities along the Kuskokwim and at adjacent Bering Sea coast stations. The account is both historical and spiritual in its orientation and was written by a former missionary in the area. It is clearly one of the very few reliable studies dealing with the Kuskokwim.

323. Schweinitz, Paul de. The Moravian mission on the Kuskokwim. Missionary Review of the World, n.s., 1890, v. 3, pp. 115-19.

A brief history of the founding of the Moravian missions in Alaska with particular emphasis on the Kilbuck family.

- 324. Science in Alaska, 1959. The nutritional status of the Alaskan Eskimo (panel discussion, participants: George Mann, Edward M. Scott, and Christine Heller). Science in Alaska, 1959. Seattle, 1960, pp. 137–39. In a summary statement Scott writes, "Specific nutritional deficiencies are not clinically apparent in Alaskan Eskimos and Indians. A low intake of ascorbic acid is indicated by both dietary and biochemical studies, but clinical signs of deficiency are lacking. Clinical, biochemical, and dietary studies all indicate a marginal intake of vitamin A. Both these problems deserve further study. On the other hand, the intakes of protein and of thiamine, riboflavin, and niacin appear ample."
- 325. Scott, C. D. Opportunities of the Kuskokwim. Alaska-Yukon Magazine, 1909, v. 8, no. 6, pp. 423-26.

A general summary of mining activities along the Kuskokwim River in 1908–09, mentioning the gold diggings, the cinnabar potential, the traders, and number of whites in the region.

326. Scott, Edward M. The relation of diaphorase of human erythrocytes to inheritance of methemoglobinemia. Journal of Clinical Investigation, 1960, v. 39, no. 7, pp. 1176–79.

1960, v. 39, no. 7, pp. 1176-79.

"Evidence is presented which indicates that parents of methemoglo-binemic children have about half the normal level of erythrocyte diaphorase, and that the condition is inherited as a simple recessive trait" (p. 1176). Deals with diaphorase levels of red cells in 271 Ingalik and 47 Eskimos on the Yukon and Kuskokwim rivers.

327. —Study of anemia in Alaskan Eskimos. Science in Alaska, 1954. Fairbanks, 1957, pp. 92–93.

Two unnamed Kuskokwim River village populations were found to be anemic. "All adult males and most females were moderately anemic, with a few severely anemic females. School children were more nearly normal, but pre-school children were moderately to severely anemic." Serum iron was consistently low. Iron deficiency seems to be the crucial factor.

328. Scott, Edward M. and Isabelle V. Griffith. Diabetes mellitus in Eskimos. Metabolism, 1957, v. 6, no. 4, pp. 320–25.

In summary it is reported: "Diabetes mellitus is rare among Alaskan Eskimos and in most localities it is unknown. Three confirmed and two possible cases in a population of 16,000 are known. The three confirmed cases are all from the Nome area." The sample included 869 Eskimo National Guardsmen between the ages of 17 and 50, plus 358 other Eskimo men and women over 35 years of age. No specific mention is made of Kuskokwim Eskimos in the sample, although it seems likely that at least some were included.

329. —Etiology of hereditary methemoglobinemia. Science in Alaska, 1959. Seattle, 1960, p. 142.

The entire abstract concerning a disease known among Kuskokwim Eskimos is as follows: "Hereditary methemoglobinemia, of which there are 18 known cases in ten families in Alaska, is caused by an inherited lack of an enzyme in red cells which causes the reduction of methemoglobin by reduced diphosphopyridine nucleotide. This enzyme is most readily demonstrated by its action as a diaphorase using 2, 6-dichloroben-zenoneindophenol as substrate. The enzyme has been purified, and its properties studied. The parents of methemoglobinemic children appear to have about half the normal level of enzyme."

330. Scott, Edward M. and Dale D. Hoskins. Congenital methemoglobinemia in Alaskan Indians and Eskimos. Science in Alaska, 1955 and 1956. (no place or date of publ.), pp. 103–04.

Two cases of congenital methemoglobinemia occur in one Kuskokwim Eskimo family. It would appear that this condition is inherited as a recessive and is more common among the Athapaskans than the Eskimos.

331. —Hereditary methemoglobinemia in Alaskan Eskimos and Indians. Blood, 1958, v. 13, no. 8, pp. 795–802.

The sample includes Kuskokwim Eskimos. Summary: "Methemoglobinemia is unusually frequent in Alaskan Eskimos and Indians in whom 15 confirmed cases in a population of about 20,000 are known. It appears to be due to the absence of a factor in red cells which mediates the reduction of methemoglobin by reduced pyridine nucleotides. This anomaly is probably inherited as a recessive trait. The amount of methemoglobin present at any one time in these persons is variable, depending on some environmental influence. The evidence suggests that this environmental influence is the dietary intake of ascorbic acid."

332. Scott, Edward M. et al. Anemia in Alaskan Eskimos. Journal of Nutrition, 1955, v. 55, no. 1, pp. 137-49.

The Alaskan Eskimo population is moderately anemic, and this study was designed to characterize the anemia and establish its origin. Included in the study of 715 Eskimo men in the National Guard, between the ages of 17 and 50, were individuals from the Kuskokwim. Additional studies were made in four unnamed villages in southwestern Alaska. A summary of the findings revealed that: "The anemia is often microcytic and hypochromic, but a considerable proportion of people, mostly men, have a moderate normochromic, normocytic anemia. Severe anemia was found only in women, and was definitely microcytic and hypochromic. Serum inorganic iron levels were uniformly low in mid-winter. Iron therapy over a 6-week period was effective in increasing serum iron in some cases, but not effective in

raising hemoglobin level except in one severely anemic woman. The data suggest that iron deficiency and some other factor are responsible for this condition."

333. —Serum-cholesterol levels and blood pressure of Alaskan Eskimo men. The Lancet, 1958, no. 7048, pp. 667–68.

The summary and conclusions are as follows: "The mean serumcholesterol level of 842 Eskimo men [including individuals from Kuskokwim River communities] did not appear to be unusual, but there were significant differences in men from different localities in Alaska. Measurements of blood-pressure showed much less variation, although here again geographic differences were found."

334. —Lack of abnormal hemoglobins in Alaskan Eskimos, Indians, and Aleuts. Science, 1959, v. 129, no. 3350, pp. 719–20.

Hemoglobin from a sample of 593 Eskimo "from all parts of Alaska" was tested for abnormalities, but none were found in any of the tests.

335. Scouler, John. On the Indian inhabiting the north-west coast of America. Edinburgh New Philosophical Journal, 1846, v. 41, pp. 168–92.

Only under "Koluschians" is there a Kuskokwim entry. It is noted that the "Inkalites" occupy the vicinity of the Yukon and Kuskokwim rivers

336. Siegel, Eli H. et al. Dietary and metabolic studies of Eskimo children with and without dental caries. American Journal of Diseases of Children, 1940, v. 59, no. 1, pp. 19-38.

Included in the sample were children from Hooper Bay Village, Kepnuk (Kipnuk), and the Moravian Orphanage at Nunapitsinghak on the Kwethluk River. The research problem was concerned with whether dental caries could be related to metabolic balances of calcium, phosphorus and nitrogen. It was found that "no correlation was found between the retentions of calcium, phosphorus or nitrogen and the presence or absence of dental caries." Finally, "The data reported in this paper also suggest that there is no basis for the view frequently held that the freedom from caries enjoyed by a primitive people is due to a nutritional superiority of 'natural' as compared with 'civilized' diets."

337. Sleem, David H. Great Kuskokwim, a new land of promise. Alaska-Yukon Magazine, 1910, v. 10, no. 5, pp. 295–301.

Includes a brief description of Bethel, the Kuskokwim geography and mineral potential, recent gold strikes on the George and Tuluksak rivers, and some general comments on the mining settlements of the upper river.

338. —The Iditarod and Kuskukwim. The prospector's opportunity. Seattle, 1910.

A good map of the Kuskokwim upon which are located many com-

munities.

339. —Sleem's map of central Alaska. Seward, 1907.

A small portion of the map includes the upper Kuskokwim with the villages as well as the portages.

340. Smith, Philip S. The Lake Clark-Central Kuskokwim region Alaska. U.S. Geological Survey Bulletin 655, 1917.

In a section on early exploration Smith utilizes information from an unpublished manuscript by Alfred H. Brooks. It is noted that Vasil'ev, accompanied by Lukin, ascended the Nushagak River and then portaged to the Holitna and went down the Kuskokwim in 1829. In 1832 Lukin established Lukin's Fort one hundred miles below the Holitna junction. This post was rebuilt "a few miles farther down the river, and named Kolmakoff's Redoubt" (p. 13). There is mention of the Glazunov trip, the explorations of Zagoskin, the trip of Spurr and Post, and the 1902–03 trip to the Holitna drainage by William R. Buckman. The geological explorations reported on in this volume were under R. H. Sargent and P. S. Smith. They went from Iliamna, to the Mulchatna tributary of the Nushagak, across the upper Holitna and down the Stony River to the Kuskokwim and over the divide to Iditarod. There is a geographical description of the Kuskokwim River and the Holitna drainage.

341. Smith, Philip S. and A. G. Maddren. Quicksilver deposits of the Kuskokwim region. Mineral Resources of Alaska, 1914 (U.S. Geological Survey Bulletin 622), 1915, pp. 272–91.

Includes a brief historical survey of searches for mercury on the Kuskokwim. Some useful information on mining history.

342. Spurr, Josiah Edward. The Kuskokwim drainage area. 55th Congress, 3rd Session, Senate Document No. 172, Washington, D.C., 1899, pp. 122–23.

A brief summary of Kuskokwim typography, access routes, explorations, resources, and the population.

343. —The log of the Kuskokwim: an exploration in Alaska. ms.

Written about 1930 and prepared for publication by his son, S. H.

Spurr. There is a little ethnographic information in this manuscript, and most of it is very superficial.

344. —A reconnaissance in southwestern Alaska in 1898. Twentieth Annual Report of the United States Geological Survey, pt. 7. Washington, D.C., 1900, pp. 31–264. (Also appears in House Document 5, 56th Congress, 1st Session, v. 29).

In 1898 the Spurr party traveled up a Susitna River tributary to the Kuskokwim River drainage and descended the Kuskokwim to the sea. The anthropological and historical information is quite superficial, while the geological descriptions are detailed. Included in the study are three other articles: Notes on the animal and vegetable life of the

region of the Sushitna and Kuskokwim rivers, by F. C. Hinckley, pp. 76–80; List of birds observed by Mr. Hinckley on the Sushitna and Kuskokwim rivers, pp. 80–85; Notes on the map of the Yukon-Kuskokwim water route, compiled by W. S. Post from notes by F. C. Hinckley, pp. 98–99.

345. Spurr, Josiah Edward and W. S. Post. Report on the Kuskokwim expedition. 55th Congress, 3rd Session, Senate Document No. 172. Washington, D. C., 1899, pp. 28–39.

A summary of the 1898 Kuskokwim explorations by Spurr and Post. Published in detail in the U.S. Geological Survey Twentieth Annual Report, 1900.

346. Stewart, T. D. Incidence of separate neural arch in the lumbar vertebrae of Eskimos. American Journal of Physical Anthropology, 1931, v. 16, no. 1, pp. 51–62.

Included in the discussion are vertebral series from the lower Kuskokwim. Summarily, in the series of 350 skeletons of Eskimos, mostly from Alaska, 27.4% were found to have one or more separate neural arches of the lumbar vertebrae. It was more common in males than females. Eskimos have the highest incidence of the races yet studied in this regard.

347. Stone, Kirk H. Populating Alaska: the United States phase. Geographical Review, 1952, v. 42, no. 3, pp. 384–404.

There is no specific discussion of the Kuskokwim region, but the discussion of populations and the nature of the Alaskan population in general is quite useful in understanding the history of the Kuskokwim.

348. Swadesh, Morris. Linguistic relations across Bering Strait. American Anthropologist, 1962, v. 64, no. 6, pp. 1262-91.

This is an attempt to relate the structures and lexicons of Eskaleutian, which includes Yuk, Inuit, and Aleut with languages of the Chukotan group, which includes Kamchadal, Koryak, and Chukchi. It is established that a distant relationship does exist. The time separating the two groups is at least 45 centuries.

349. —Unaaliq and Proto Eskimo. International Journal of American Linguistics, 1951, v. 17, pp. 66–70; v. 18, pp. 25–34, 69–76, 166–71, 241–56.

One of the sources for the Yuk vocabulary was the Kuskokwim vocabulary and grammar by John Hinz.

350. Swanton, John R. The Indian tribes of North America. Bureau of American Ethnology, Bulletin 145, 1953.

Included is information about Ingalik Indian villages on the Kuskokwim (pp. 533-34) and the Eskimo or "Kuskwogmiut" communities (pp. 563-65). The geographical locations of the settlements mentioned are usually so vague that it is impossible to locate them on a map.

351. Task force on Alaska native affairs, Report to the Secretary of the Interior. (no place of publ.), offset printed, 1962.

The Bureau of Indian Affairs in 1962 made a field study of conditions among the people of aboriginal descent in Alaska. The report includes brief historical summaries of different aspects of Aleut, Eskimo, and Indian affairs with a long series of recommended changes in administrative policies. The historical summaries are particularly useful since they are brief but comprehensive.

352. Tikhmenev, Peter Aleksandrovich. The historical review of formation of the Russian-American Company. St. Petersburg, 1861, pt. I; 1863, pt. II (translated by Dimitri Krenov, 1939–40, Works Progress Administration, Seattle, Washington).

This history contains the best published source material on the Kuskokwim River explorations by the Russians. Included is a statement on the 1818 explorations of Kuskokwim Bay and the lower river (pt. I, pp. 300-02 of the translation) and the founding of the Nushagak redoubt (Alexandrovski) in the same year. The 1829 trip toward the Kuskokwim River drainage by Vasil'ev (pt. I, pp. 339-40) and the successful explorations of 1830 (pt. 1, pp. 340-41), plus the founding of a trading establishment at the mouth of the Holitna River in 1832 (?), its removal to the Kwigim (Kwik) River mouth and relocation to Kolmakov Redoubt in 1841, are all recounted (pt. I, p. 341). Mentioned, too, are the travels of Kolmakov, his son, and Lukin (pt. I, pp. 341-42); Lukin's problems with an attack on his trading establishment (pt. I, p. 348); smallpox on the Kuskokwim in 1837, 1838, or 1839 (pt. I, 368, fn. 2); an account of L. A. Zagoskin's travels on the Kuskokwim River (pt. II, pp. 223-30); general observations by Zagoskin, and fur takes at Kolmakov Redoubt (pt. II, p. 402).

- 353. Tundra times. Fairbanks (v. 1, no. 1, was published October 1, 1962). The Tundra Times is a weekly newspaper whose stated purpose is to inform the native people of northern Alaska about matters of concern to them and to serve as an organ for native organizations. Kuskokwim news items may be found in v. 1, nos. 8, 10, 11, 13, 14, and 20.
- 354. Turner, L. M. Contributions to the natural history of Alaska. Arctic Series of Publications issued in connection with the Signal Service, U.S. Army, no. 2. Washington, D.C., 1886.

The Turner observations, made between the years 1874 and 1881, are primarily for St. Michael, the Aleutian area and St. Paul Island. He does, however, generalize about Alaskan fauna and flora including comments on Kuskokwim occurrences.

- U.S. Bureau of Census. Washington, D.C.
- 355. 1880. Petroff, Ivan. Report on the population, industries, and resources of Alaska. 1884. Also appears in Narratives of explora-

tions in Alaska. 56th Congress, 1st Session, Report No. 1023. Washington, D.C., 1900, pp. 55–284. Petroff devotes two pages to the Kuskokwagamute describing their distribution, burials, clothing, and physical appearance, as well as the kashgee. The Kuskokwim population is as follows: Akkiagmute, 175; Akooligamute, 162; Kalmakovsky Redoubt, 12; Kaltkhagamute, 106; Kik-khtagamute, 232; Kinagamute, 60; Kokhlokh tokhpagamute, 51; Kooigamute, 215; Kuljkhlugamute, 75; Kwigalogamute, 314; Lomawigamute, 81; Mumtrekhlagamute station, 29; Mumtrekhlagamute village, 41; Naghikhlavigamute, 193; Napahaiagamute, 98; Napaimute, 60; Napaskiagamute, 196; Okhogamute, 130; Oogovigamute, 206; Paimute, 30; Taghiaratzoriamute, 52; Tookhlagamute, 92; Toolookaanahamute, 59; Tuluksak, 150; village at headwaters, 50; single houses, 10 and 10; roaming Koltchane, 35; total, 2,924.

- 356. 1890. Porter, Robert P., compiler. Report on population and resources of Alaska at the Eleventh census: 1890. 1893. The map in this report does not include the locations of most villages. However, by using the Tenth census map, it is possible to locate many of the settlements. Those communities which are most likely Kuskokwim are as follows: Ahpokagamiut, 210; Akiagamiut, 97; Akiakchagmiut, 43; Bethel, 20; Kaltkagamiut, 29; Kikikhtagamiut, 119; Kinegnagamiut, 92; Kochlogtog pagamiut, 20; Kolmakovsky, 26; Kuskohkagamiut, 115; Lomavigamiut, 53; Mumtrekhlagamiut, 33; Napaimiut, 23; Napaskeagamiut, 97; Oh-hagamiut, 36; Tulukagnagamiut, 17; Tuluksagmiut, 62; Ugavigamiut, 57; Ugokhamiut, 68; Vinisahle, 140. The total population for the above communities is 1357. Included in the text of the report is a brief but useful discussion of Kuskokwim history as well as ethnographic facts concerning the regional population.
- 357. 1900. Twelfth census of the United States, 1900. v. 1, Population, pt. 1. 1901. Only one Kuskokwim River village may be identified with certainty, Akiachak with a population of 165 (p. 426). This census report is quite obviously very incomplete.
- 358. 1910. Thirteenth census of the United States, 1910, Population. v. 3, pp. 1133–34. 1913. The listing is only by district, and the statistics on the population for particular villages are few. Bethel is recorded as 110; Napakiak as 166, but no other Kuskokwim communities are included.
- 359. 1920. Fourteenth census of the United States, 1920, Population. v. 1, pp. 680–81. 1921. The Kuskokwim River villages listed, which clearly may be identified, are as follows: Akiak, 150; Bethel, 221; Eek, 119; McGrath, 90; Napakiakamute, 173; Ohagamute, 92; Tuluksak, 73. The total for these communities is 918.

- 360. 1930. Fifteenth census of the United States, 1930, Population. v. 1, pp. 1220–27. 1931. The Kuskokwim River listings are as follows: Akiak, 228; Bethel, 278; McGrath, 112, Medfra, 24; Napaimut, 111; Sleitmut, 133; Tuluksak, 96. The total is 982.
- 361. 1940. Sixteenth census of the United States, 1940, Population. v. 1, pp. 1192–97. The Kuskokwim River listings are as follows: Akiachok, 156; Akiak, 209; Akolorachok, 15; Aniak, 122; Bethel, 376; Crooked Creek, 48; Eek, 170; Hungry Village, 38; Kalskag, 76; Kinak, 36; McGrath, 138; Napakiak, 113; Napamiute, 75; Napaskiak, 67; Ohogamut, 29; Old Kalskag, 70; Oscarville, 11; Parks, 11; Pinak, 17; Quithlook, 186; Sleitmute, 86; Tuluksak, 88. The total is 2137.
- 362. 1950. Census of population: 1950, v. 2, p. 6. 1952. The Kuskokwim River communities listed from Eek to Nicholai, and the figures, are as follows: Akiachak, 179; Akiak, 168; Aniak, 142; Bethel, 651; Crooked Creek, 43; Eek, 141; Hungry Village (Lime Village), 29; Kalskag, 139; Kwethluk, 242; Lower Kalskag, 88; McGrath, 175; Medfra, 25; Napaimiut, 44; Napaiskak (Napaskiak), 121; Napakiak, 139; Nicholai, 88; Oscarville, 27; Sleetmute, 120; Takotna, 42; Tuluksak, 116. The total for the Kuskokwim River is 2,719.
- 363. 1960. U.S. Census of population: 1960, number of inhabitants, Alaska. 1960. The Kuskokwim River communities listed, from Eek to Nicholai, and the figures are as follows: Akiachak, 229; Akiak, 187; Aniak, 308; Bethel, 1,258; Crooked Creek, 92; Eek, 200; Kalskag, 147; Kwethluk, 325; Lower Kalskag, 122; McGrath, 241; Napaiskak (Napaskiak), 154; Napakiak, 190; Nicholai, 85; Oscarville, 51; Red Devil, 152; Sleetmute, 122; Takotna, 40; Tuluksak, 137. The total for the Kuskokwim River is 4,040.

U.S. Bureau of Education.

- Jackson, Sheldon. Report on education in Alaska. Washington, D.C., 1886. The Kuskokwim River population is given as 3,654 for some 40 villages (p. 13). Reported too, is the Moravian Church missionary trip in 1844 to locate a mission site; the founding of Bethel mission in 1885 by the Moravians, and that W. H. Weinland was appointed as the government teacher in 1886 (p. 29). Appendix 1 is a diary account kept by J. A. Hartmann on the exploring trip made in 1884 with W. H. Weinland (pp. 55-75).
 - U.S. Bureau of Education: Report of the Commissioner of Education, Washington, D.C.
- 365. 1885–86. Jackson, Sheldon. Schools in Alaska. 1887, Appendix 11, pp. 750–53. Describes establishment of Moravian mission 1885.
- 366. 1886–87. Lamar, L. Q. C. Alaska. 1888, ch. 3, pp. 98–100. Under this subheading appears Rules and regulations for the conduct of public schools and education in the Territory of Alaska.

- Jackson, Sheldon. Report of the general agent. ch. 3, pp. 100–11. Brief mention of establishing the Moravian mission at Bethel (p. 101) and the opening of a school at Bethel (p. 104) in 1886.
- 367. 1887–88. Jackson, Sheldon. Alaska. ch. 6, pp. 181–94. Includes a brief summary of the difficulties of the Bethel contract school of the Moravian missionaries, Russian Orthodox opposition and Eskimo marriage patterns (pp. 185–86).
- 368. 1888–89. Jackson, Sheldon. Report of the general agent of education for Alaska to the Territorial Board. 1891, v. 2, pt. 3, ch. 24, pp. 753–64. Includes a brief mention of the Bethel contract school of the Moravian Church (p. 756).
- 369. 1889-90. Jackson, Sheldon. Education in Alaska. 1893, v. 2, pts. 2-3, ch. 17, pp. 1244-1300. Includes a brief, but highly informative, statement on the Bethel contract school (p. 1249), statistics (p. 1254), a comment upon the killing of a witch at the Kuskokwim River mouth (p. 1290), plus Jackson's description of the establishment of the Moravian mission at Bethel (p. 1294).
- 370. 1890-91. Jackson, Sheldon. Report on education in Alaska. 1894, v. 2, pts. 2-3, ch. 25, pp. 923-60. A brief summary of the Moravian activities at their Bethel school (p. 928), a comment on food shortage along the Kuskokwim (p. 956), statistics on school finances, as well as enrollment figures and monthly attendance (p. 934).
- 371. 1891–92. Jackson, Sheldon. Education in Alaska. 1894, v. 2, ch. 28, pp. 873–92. Brief summary (p. 875) of the Bethel boarding school of the Moravian Church and its 34 boarding pupils.
- 372. 1892-93. Jackson, Sheldon. Report on educational affairs in Alaska. 1895, v. 2, pts. 3, 4, ch. 9, pp. 1705-48. Mention of the establishment of the Bethel mission by the Moravians; the Weinland family leaving the mission for California; the new personnel at the Bethel mission; the founding of the station Ongavigamute (Ogavik) and the erection in 1893 of a sawmill at Bethel (p. 1737).
- 373. 1893–94. Jackson, Sheldon. Report on education in Alaska. 1896, v. 2, pts. 2, 3, ch. 12, pp. 1451–92. Mentions Bethel contract school (p. 1459), and excerpts from Kilbuck's diary, which include comments on infanticide, murder, shamans, disease (pp. 1459–60), and hymns translated into Eskimo.
- 374. 1894-95. Jackson, Sheldon. Report on education in Alaska. 1896, v. 2, pts. 2, 3, ch. 33, pp. 1425-55. Brief summary of the problems at Bethel and Ogavik for the Moravian missionaries with particular emphasis upon difficulties with the shamans (pp. 1429-30). Specific mention of training catechists to work in the villages; the Helper Neck system for recording Eskimo; the requests of Napaskiak, Napakiak, and Lomavik for permanent missionaries; the missionary

- conference; and comments on a speech by the Carlisle Indian School educated David Skuviuk.
- 375. 1895–96. Jackson, Sheldon. Report on education in Alaska. 1897, v. 2, ch. 34, pp. 1435–68. Summary of the Moravian mission conditions at Bethel and Ogavik (pp. 1442–43).
- 376. 1896–97. Jackson, Sheldon. Report on education in Alaska. 1898, v. 2, ch. 35, pp. 1601–46. Summary of the founding of the Moravian mission at Bethel; the addition of Dr. Herman Romig to the staff; the deplorable conditions of Eskimo life (pp. 1619–20).
- 377. 1897–98. Jackson, Sheldon. Report on education in Alaska. 1899, v. 2, ch. 40, pp. 1753–71. Brief report upon the drowning of the Moravian missionaries, Mr. and Mrs. Weber (p. 1765) plus mention of scarcity of food that forced the closing of the Bethel school in early winter (p. 1765).
- 378. 1898–99. Jackson, Sheldon. Report on education in Alaska. 1900, v. 2, ch. 31, pp. 1373–1402. Note is made of the closing of the Moravian mission school in Bethel for "lack of means"; the rise in prices due to the Yukon gold rush is commented upon; the outstation at Naposikagamute (Napaskiak) is mentioned and the difficulties with the people there (pp. 1392–93).
- 379. 1899–1900. Jackson, Sheldon. Report on education in Alaska. 1901, v. 2, ch. 32, pp. 1733–62. The problem of supplies is discussed since the annual supply vessel did not arrive at the Moravian mission at Bethel; casual comments on the work at Akiagamiut (Akiak) and Akiatshagamiut (Akiachuk) (p. 1758).
 - Jackson, Sheldon. Tenth annual report on the introduction of domestic reindeer into Alaska. 1901, v. 2, ch. 33, pp. 1763–85. Reference to Romig going to Eaton in 1900 for reindeer but stopped because of natives' illness during an epidemic (p. 1772).
- 380. 1900-01. Jackson, Sheldon. Report on education in Alaska. 1903, v. 2, ch. 31, pp. 1459-80. The Moravian missionaries mention the epidemic of 1900 as well as a brief report of the Ogavik station (p. 1476).
 - Jackson, Sheldon. Eleventh annual report on the introduction of domestic reindeer into Alaska. 1903, v. 2, ch. 32, pp. 1481–98. Reference to the establishment of Moravian herd (p. 1482) and number of deer—256 (p. 1487).
- 381. 1901–02. Jackson, Sheldon. Report on education in Alaska. 1903, v. 2, ch. 32, pp. 1229–56. Mention of the Roman Catholic mission at St. Ignatius on the Kuskokwim River with Rev. A. Robaut as the resident priest (p. 1250); a superficial account of Moravian mission conditions at Bethel (p. 1251).
 - Jackson, Sheldon. Twelfth annual report of the introduction of domestic reindeer into Alaska. 1903, v. 2, ch. 33, pp. 1257-69. Ref-

- erence to Moravians and Kuskokwim herd—388 reindeer, including those cared for by Lapps (pp. 1257, 1258, 1260, 1263).
- 382. 1902–03. Jackson, Sheldon. Report on education in Alaska. 1905, v. 2, ch. 44, pp. 2333–64. Note is made (p. 2358) that the St. Ignatius mission on the Kuskokwim was completely destroyed by fire the night of November 30, 1903, and that Father Robaut barely escaped; the mission is to be rebuilt at once. The Moravian mission report notes that there are 11 small outposts, besides the Bethel station, with 87 communicants and a total of 358 persons, while Ogavik has 2 outposts, 88 communicants, and a total of 186 persons. The Bethel day school has 22 students. Reindeer are also noted as having been introduced to the region (p. 2358).

Jackson, Sheldon. Thirteenth annual report on the introduction of domestic reindeer into Alaska. 1905, v. 2, ch. 45, pp. 2365–84. A table (p. 2371) notes that there were 792 reindeer on the Kuskokwim, of which 176 were government deer, 403 belonged to Lapps, and 213 to the Moravian mission.

- 383. 1903-04. Jackson, Sheldon. Report on education in Alaska. 1906, v. 2, ch. 36, pp. 2257-68. Brief mention (p. 2260) of the Bethel school managed by the Moravian Church. Speaks of the difficulties the children have in pronouncing certain English sounds and their progress in arithmetic.
- 384. 1904-05. Jackson, Sheldon. Report on education in Alaska. 1907, v. 1, ch. 13, pp. 267-82. Brief mention of the Moravian school at Bethel, (p. 271), the vocational program success; difficulties in learning arithmetic; the slow response of girls; reading and writing success.
- 385. 1905-06. Jackson, Sheldon. Report on education in Alaska and the introduction of reindeer. 1907, v. 1, ch. 10, pp. 237-55. A brief summary (p. 250) of general progress at the Bethel school.
- 386. 1606-07. Updegraff, Harlan. Report on the Alaska school service and on the Alaska reindeer service. 1908, v. 1, ch. 15, pp. 371-411. The brief history of schools in Alaska and the current (1906) status of the people form a very good summary (pp. 371-96). There is statistical mention of the Kuskokwim reindeer herds (pp. 401, 403).
- 387. 1908–09. Updegraff, Harlan. Report on education in Alaska. 1910, v. 1, ch. 69, pp. 1297–1326. Included in an appendix is Report of W. T. Lopp, superintendent of the Northern District, in which Lopp describes a survey trip to the Kuskokwim River region, among others, and observations at Bethel, plus comments upon the reindeer industry in the Kuskokwim area.
- 388. 1910–11. Report on education of the natives of Alaska and the reindeer service, 1910–11. U.S. Bureau of Education, Alaska School Service, No. 484, 1912. Under the heading of Village sanitation and

- personal cleanliness are comments upon Bethel. The note concerns home improvements in the main (p. 62).
- 389. 1911–12. Report on the work of the Bureau of Education for the natives of Alaska, 1911–12. U.S. Bureau of Education Bull., 1913, no. 36, 1913. Included is a report (pp. 19–22) on the new school at Akiak, opened by J. H. Kilbuck in 1911. He writes of the physical community, gardening, school conditions and enrollments, village population, and village life. There is also mention of an upriver trip to Slitmiut (Sleetmiut) and comments upon the age composition of the population as a result of the 1900 epidemic and something of the settlement patterns.
- 390. 1912–13. Report on the work of the Bureau of Education for the natives of Alaska, 1912–13. U.S. Bureau of Education Bull., 1914, no. 31, 1914. The superintendent of the Western District, A. N. Evans, comments on a visit to Bethel and on the fact that Dr. Reed, a medical doctor, made arrangements to set up a dispensary at Bethel. There is also brief comment upon the Akiak school (p. 27).
- 391. 1913–14. Report of the work of the Bureau of Education for the natives of Alaska, 1913–14. U.S. Bureau of Education Bull., 1915, no. 48, 1915. Included is a brief report (pp. 38–39) by Dr. J. W. Reed, at Bethel, upon his travels in caring for the ill of the region. He recommends building a small hospital somewhere above Bethel in the timbered region. He comments that 20% of the people have tuberculosis and that it is rapidly increasing.
- 392. 1914–15. Report on the work of the Bureau of Education for the natives of Alaska, 1914–15. U.S. Bureau of Education Bull., 1916, no. 47, 1917. Included is a report (pp. 62–65) by J. H. Kilbuck upon conditions at Akiak. The categories mentioned are: the work of the school, gardening, the village, reindeer, and health.
- 393. 1915–16. Report on the work of the Bureau of Education for the natives of Alaska, 1915–16. U.S. Bureau of Education Bull., 1917, no. 32, 1917. The acting superintendent of schools in the Western District, Walter H. Johnson, reports (p. 26) that the school at Kinak is being moved to Eek since the latter has a year-round population. Note is made of the need for a hospital (p. 27) at either Bethel or Akiak. A report upon the Akiak school is made by J. H. Kilbuck (pp. 48–51) in which he comments upon the gardening success, new items of material culture in the village, reindeer success and progress at the school.
- 394. 1916–17. Work of the Bureau of Education for the natives of Alaska, 1916–17. U.S. Bureau of Education Bull., 1918, no. 5, 1918. The report of the assistant superintendent of the Western District, J. H. Kilbuck, notes that the area schools include Bethel and Akiak plus the Kinak school which is being moved to Eek. Mention is made of the

- annual reindeer fair, introduced four years previously, and recommendations are made (pp. 26-28).
- 395. 1917–18. Work of the Bureau of Education for the natives of Alaska, 1917–18. U.S. Bureau of Education Bull., 1919, no. 40, 1919. The assistant superintendent of schools in the Western District, J. H. Kilbuck, discusses the ill effects of the introduction of white man's dances at Bethel and Akiak (pp. 22–24). A report by the Akiak hospital doctor, Frank W. Lamb, (pp. 31–32) gives a summary of the work of the hospital.
- 396. 1929–30. Kalbach, L. A. Division of Administration. 1930, pp. 34–37. A list of village schools, with their enrollment and the village population (pp. 35–36), includes the Kuskokwim communities of Akiak, Bethel, Eek, and Sleetmiut. Mention is made of a school opening during the next school year at Akiachak and Tuluksak (pp. 36–37).
 - U.S. Commissioner of Indian Affairs, Report of the (in Report of the Secretary of the Interior). Washington, D.C.
- 397. 1873-74. 1875, v. 1. Included is an abstract of the population of the native tribes of Alaska by W. H. Dall. The time involved seems to be 1872. The Kuskwogmut (mouth of the Kuskokwim River) population is given as 2,000 (p. 705).
- 398. 1886–87. 1887, v. 2. Mention under the heading Bethel (pp. 1215 –16) is made of the Moravian missionaries establishing themselves at Bethel in 1885 and building a 12 × 14 foot building. During the summer of 1886, a school building was erected and instruction begun.
- 399. 1889–90. 1890, v. 2. A section on Alaskan schools (pp. 795–97) includes attendance at Bethel in 1889–90. This is the only Kuskokwim school listed.
- 400. U.S. Congress. Committees of the House of Representatives for the 2nd Session of the 50th Congress, Report of the fur-seal fisheries of Alaska. 1888–89, rept. no. 3883. Washington, D.C., 1889.
 - Kuskokwim information includes a statement on the Alaska Commercial Company Kuskokwim trade (pp. 95, 147), the trader (p. 325), a statement by A. Hartmann on the Alaska Commercial Company and the kindness he received from its agents (p. 329), a summary of Petroff's 10th census data (pp. 381–82), a letter by W. Weinland concerning his reception by A. C. Co. agents and a similar letter by G. King (pp. 398–400).
- 401. —Russian administration of Alaska and the status of the Alaskan natives. 81st Congress, 2nd Session, doc. no. 152. Washington, D.C., 1950. This general discussion includes few specific references to Kuskokwim peoples. However, it is an invaluable source on Russian attitudes and policies toward the aboriginal peoples. Appendices of greatest

significance are selections from the works of Petroff and Tikhmenev. The appendix on Russian materials in the Library of Congress dealing with Alaskan natives is very useful.

402. —Russian America. House of Representatives, 40th Congress, 2nd Session, Ex. doc. no. 177. Washington, D.C., 1868.

A memorandum by Kostlivzov mentions the Kuskokwim peoples (pp. 23–24) among others; a letter from a Mr. Collins to Seward mentions the Kuskokwim River system (p. 26); Sumner's speech on the cession includes mention of the Kodiak district as including the Kuskokwim (p. 150).

403. —Interim Report of the Committee on the Judiciary. Juvenile delinquency in the Territory of Alaska. 84th Congress, 2nd Session, U.S. Senate, rept. no. 2774. Washington, D.C., 1956.

Included in this study is an appendix, no. 27, titled, Report of Alaska Department of Public Welfare, by Eugene V. Pugh, which includes excellent information on many Kuskokwim River communities collected during field studies between 1952 and 1955. The village reports are brief but far-ranging descriptions. Included, too, are tables dealing with village economic conditions with particular reference to welfare aid. The settlements along the Kuskokwim discussed in detail are as follows: Akiachak, Akiak, Aniak, Bethel, Crooked Creek, Eek, Kalskag, Kwethluk, Lime Village, McGrath, Medfra, Napakiak, Napamute, Napaskiak, Sleetmute, Stony River, and Tuluksak.

404. U.S. Department of the Interior. Alaska, a reconnaissance report of the potential development of water resources in the Territory of Alaska for irrigation, power production and other beneficial uses. House Document 197, 82nd Congress, 1st Session. Washington, D.C., 1952.

The brief discussion of the Kuskokwim geography is concerned with where a dam might most feasibly be constructed. The most likely locality in which to build a dam was considered to be about 8 miles upstream from the community of Crooked Creek (pp. 162–63).

405. —Corporate charter of the Akiachak native community Alaska. U.S. Department of the Interior, Bureau of Indian Affairs. Washington, D.C., 1950.

The charter of Akiachak was organized under the terms of the Indian Reorganization Act of 1934 as it was amended in 1936. The charter was ratified in 1948.

406. —Corporate charter of the Akiak native community Alaska. U.S. Department of the Interior, Bureau of Indian Affairs. Washington, D.C., 1950.

The charter of Akiak was organized under the terms of the Indian Reorganization Act of 1934 as it was amended in 1936. The charter was ratified in 1949.

- 407. —Corporate charter of the native village of Napakiak Alaska. U.S. Department of the Interior, Bureau of Indian Affairs. Washington, D.C., 1950.
 - The charter of Napakiak was organized under the terms of the Indian Reorganization Act of 1934 as it was amended in 1936. The charter was ratified in 1946.
- 408. —Corporate charter of the organized village of Kwethluk. U.S. Department of the Interior, Office of Indian Affairs. Washington, D.C., 1941. The charter of Kwethluk was organized under the terms of the Indian Reorganization Act of 1934 as it was amended in 1936. The charter was ratified in 1940.
 - U.S. Secretary of the Interior annual report. Annual report of the Governor of Alaska, in variously titled: Report of the Secretary of the Interior, U.S. Department of the Interior, Annual report, and Annual reports of the Department of the Interior.
- 409. 1884-85. 1885, v. 2, pp. 911-27. Teachers have been sent to the Kuskokwim river to establish schools (p. 912).
- 410. 1885-86. 1886, v. 2, pp. 937-87. Cinnabar is reported to have been found along the Kuskokwim (p. 949).
- 411. 1886–87. 1887, v. 1, pp. 743–44. In an appendix (C) is a report by A. K. Delaney, special counsel on behalf of the United States, involving the capture of British sealers. As a part of Delaney's case is a historical sketch of Alaska from 1725 to 1867. Mention is made (on pp. 743–44) of the 1819 explorations of Lt. Yanovsky who "made extensive explorations of the coast and mainland above the Alaska Peninsula." One expedition explored and made a preliminary survey as far as the Kuskokwim mouth. Another pushed from Nushagak to the Kuskokwim. "In 1854 that eminent divine of the Greek church, Bishop Viniaminoff, visited the coast between Bristol Bay and the Kuskoquim, establishing missions, chapels and churches." Zagoskin's travels mentioned also (p. 744).
- 412. 1887–88. 1888, v. 3, pp. 959–1008. Mention of a Moravian mission school at Bethel and the suggestion that financial assistance be given (p. 983).
- 413. 1888–89. 1890, v. 3, pp. 219–47. Mention that the Moravian boarding school at Bethel is being aided by the Federal government (pp. 231, 246) and that Bethel receives one mail a year (p. 246).
- 414. 1889–90. 1891, v. 3, pp. 433–61. Mention of financial assistance to the Bethel school of the Moravians (p. 439) and of the Moravian mission (p. 456).
- 415. 1890-91. 1892, v. 3, pp. 463-513. Bethel should have some legal authorities (p. 480); the Alaska Commercial Company operates three trading stations on the river and on the bay (p. 485). The Bethel

- school received \$1,000 when its reports were received (p. 512).
- 416. 1891–92. 1893, v. 3, pp. 483–541. The Alaska Commercial Company employs R. Sippery as its principal agent, with assistants at Lower Station, Kolmakofsky, Muntrelegamute, and Venasile, all of whom have native agents. The warehouse at the mouth of the river is where the trader receives his supplies once a year (p. 512). Further mention of the Moravian mission establishment at Bethel (pp. 532, 535).
- 417. 1894-95. 1895, v. 3, pp. 311-28. Mention of the Moravians at Bethel and Ugavig and that the Roman Catholics have a Kuskokwim mission in the charge of Father A. Roberts (p. 325).
- 418. 1895-96. 1896, v. 3, pp. 193-206. Bethel school mentioned (p. 201).
- 419. 1897–98. 1898, v. 3, pp. 181–225. Recorded the loss of a steamer and barge at the mouth of the river. Drowned were Rev. Weber, his wife and child who were returning to the Moravian mission (p. 207).
- 420. 1898–99. 1899, v. 3, pt. 2, pp. 5–51. Prospectors are searching for cinnabar on the Kuskokwim (p. 29).
- 421. 1901–02. 1903, v. 3, pt. 2, pp. 7–72. Report of cinnabar finds at Kuskokwim headquarters (p. 51).
- 422. 1902–03. 1903, v. 3, pt. 2, pp. 1–74. Duncan McDonell is the U.S. Commissioner for the Kuskokwim precinct and resides at Kolmakoff (p. 63), and J. H. Romig was appointed as notary public until 1907 (p. 68).
- 423. 1904-05. 1905, v. 4, pp. 1-125. A railroad termed the Alaska Short Line has been projected and surveyed to run from Iliamna across the Kuskokwim to Anvik on the Yukon (p. 24). Comment is made on the Bethel school (p. 45) and the post office in Bethel (p. 46). In appendices further Kuskokwim references include: the fact that there is a good reindeer herding country along the river (p. 64); a mention of the Kolmakof trading post (p. 113); and cinnabar ore from the Kuskokwim was being exhibited in Portland (p. 116).
- 424. 1905-06. 1907, v. 3, pp. 1-39. Encouraging reports about gold prospects on the upper river but that transportation problems were difficult (p. 8). Peter H. McGrath was appointed U.S. Commissioner (p. 22).
- 425. 1906-07. 1907, v. 2, pp. 429-84. The encouraging reports about gold continue (p. 435) and reports about the Moravian school at Bethel (p. 451 app.).
- 426. 1907–08. 1908, v. 2, pp. 263–79. Encouraging reports about gold prospects at the headwaters regions have not been comfirmed completely (p. 270).
- 427. 1908–09. 1910, v. 2, pp. 459–74. There is an increase in mining, and the reports are encouraging (pp. 465–66).
- 428. 1909-10. 1911, v. 2, pp. 231-313. A stampede of placer miners and

- prospectors to the Iditarod and Kuskokwim (p. 237) and the school at Bethel mentioned (p. 261 app.).
- 429. *1911–12*. 1913, v. 2, pp. 519–42. The value of merchandise from the U.S. to Bethel \$98,941 and the Kuskokwim \$57,042 (p. 567 app.).
- 430. 1912–13. 1914, v. 2, pp. 511–50. The possibilities of agriculture for the Kuskokwim are mentioned (p. 520) and that the reindeer industry had not reached the upper Kuskokwim (p. 523).
- 431. 1913–14. 1915, v. 2, pp. 337–82. Table of reindeer herds includes the Kuskokwim herds (p. 348); the lower Kuskokwim creeks are promising for the operation of gold dredges (p. 353), and coal is found on Big River, a Kuskokwim tributary (p. 365).
- 432. 1914-15. 1916, v. 2, pp. 449-518. During 1915 there was a large reindeer fair at Akiak, the third such fair held there (p. 473), new gold discoveries have been reported for the Kuskokwim River region (p. 508), and Maddren reports nine gold mining and prospecting operations along the river in 1914 (p. 516).
- 433. 1915–16. 1916, pp. 1–109. Twenty-five mines are operating in the Kuskokwim region, employing 80 men and producing \$100,000 in gold (p. 41). A 10-bed hospital is planned for the Kuskokwim (p. 52), and a reindeer fair was held at Akiak (p. 53).
- 434. 1916–17. 1917, pp. 1–81. Mention of gardening on the Kuskokwim (p. 12); the construction of cabins for tubercular patients at Akiak (p. 21); the cinnabar production at Parks (p. 38); and that the most productive mining was in the Aniak area (p. 47).
- 435. 1917–18. 1919, v. 2, pp. 507–82. The Akiak hospital is in operation (p. 516); a dredge will begin operating at the upper end of Candle Creek in 1918, and there was a new strike reported between Nixon Creek and the North Fork, while 1917 production was estimated at \$135,000 (p. 538).
- 436. 1918–19. 1920, v. 2, pp. 403–88. The value of placer gold from the Kuskokwim region for 1918 is \$100,000 (p. 417).
- 437. 1919–20, 1920, v. 2, pp. 1–132. Note is made of the mining operations (pp. 19, 25, 26, 28), that J. H. Kilbuck is appointed superintendent of native schools in western Alaska (p. 83) and there are fourth class post offices at Akiak, Aniak, and Bethel (p. 88). Aids to navigation were recommended for the mouth of the river, and an investigation was being made to determine whether there could be commercial fishing at the mouth of the river (p. 113).
- 438. 1920–21. 1921, v. 2, pp. 1–66. The auriferous lode on Nixon Fork continues to be exploited, and the same applies to the gold deposits at Candle Creek (p. 24). The success of agriculture instruction is mentioned (p. 64).
- 439. 1921-22. 1922, pp. 1-73. The Bureau of Education erected a school