

**A Selected Annotated Bibliography  
of Sources  
On Reindeer Herding in Alaska**



**Occasional Publications  
On Northern Life  
No. 2**

**Institute of Arctic Biology  
University of Alaska  
Fairbanks, Alaska**



A SELECTED ANNOTATED BIBLIOGRAPHY  
OF SOURCES  
ON REINDEER HERDING IN  
ALASKA

Compiled by  
Richard Olav Stern

Occasional Papers on Northern Life  
No. 2  
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Published by the Institute of Arctic Biology, University of Alaska,  
Fairbanks, under contract number CX-9000-6-0098 from the National  
Park Service.  
Printed in the United States of America.



Library of Congress Catalogue Card Number:

May 1977

IAB Occasional Papers on Northern Life are published periodically by the Institute of Arctic Biology. This report was prepared by Richard O. Stern, Research Associate in Anthropology at the Institute, whose special interest lies in social aspects of arctic anthropology.

George C. West, Acting Director



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## Preface and Acknowledgements

This bibliography was prepared while the author was a research associate with the Institute of Arctic Biology, University of Alaska, Fairbanks. The research project under which this bibliography was prepared was funded jointly by the National Park Service and the U.S. Fish and Wildlife Service through a research contract to IAB. The opinions and annotations expressed herein are those of the author. They do not necessarily reflect the policies of either of these two agencies, the University of Alaska or the opinions of their personnel.

In any set of acknowledgements, the author is bound to inadvertently omit some person or agency whose comments, advice or criticism shaped the outcome of the researcher's efforts. This bibliography is no exception, and the author apologizes in advance to anyone whose name is omitted from this list. Had it not been for Al Dekin and Ed Hall, this whole thing would never have gotten off the ground. Larry Naylor attempted some editing of this bibliography. Wayne C. Thomas, Larry Naylor and Zorro Bradley provided assistance in securing the research contract as did Dr. George West, the Director of IAB. The staffs of the various agencies, libraries and archives (listed in Appendix I) which were consulted during the preparation of this bibliography were all helpful and interested in the research. They went out of their way to seek sources and data which are incorporated into this bibliography. I thank all of them for their help - in particular Terry Hubbard, Rochelle Sager, Diane Gudge-Holmes, David Hickok, Clayton Hardy, Cynthia Wentworth, Fran Mauer, Curtis Wilson, Donald K. Fortenbery, Janet Hayden, Stell Newman, M. Diane Brenner, Bradford Tuck, Paul Engelman, Zelma Doig, Robert Hinman, Edward L. Nygard, Phillip Lothyan, David Piff, Donald Field, Richard Reanier, Joan Dubuque, Judy Dubuque, Tom Rowe, Kathi Huffsmith, Rennee Jaussaud, Richard Crawford, Gerry Clark, Georgeanne L. Reynolds, David O. Scott, Dorothy Jean Ray.

The author thanks and acknowledges the cooperation of Dr. James VanStone for permission to quote from the annotated bibliography by Angress and Reed published in *Fieldiana: Anthropology* by the Field Museum of Natural History, Chicago; Fred Dean and Jim Morrow for permission to quote from *Biological Papers of the University of Alaska*; and the National Archives for permission to quote from unpublished search materials.



## Section I.

### INTRODUCTION

This bibliography is the result of an extensive survey into the written sources of information about the reindeer industry in Alaska. It is the expansion of an earlier bibliography (Stern 1975) and includes many new source materials. The purpose of the survey of the literature and the preparation of an annotated bibliography was twofold. First, it was considered highly desirable to have a reference source available that summarized sources of information on social, economic, cultural and historical aspects of reindeer herding in Alaska. This reference source can be used as a basis for evaluating our current state of knowledge about the social and economic factors that affect the reindeer industry. The second goal was to identify any deficiencies in the literature about the socio-economic characteristics of the industry. By using the information summarized in this bibliography, the task of identifying these deficiencies is made easier. The selection of new research goals is easier once the current state of knowledge has been assessed. Books, reports, articles and papers that deal exclusively or largely with biological aspects of reindeer behavior, physiology and biology have not been included in this bibliography. There are a few exceptions to this statement. Zhigunov (ed. 1968) is the most recent summary of data on reindeer husbandry available and is included because it outlines the biological principles upon which any successful reindeer husbandry program needs to be based. Floss (1967) provides a bibliography that



covers the recent literature on reindeer breeding, nutrition, feeding, management, etc. from Russian and Scandinavian sources. Unfortunately most of this literature has not been translated yet into English.

The literature available that deals with reindeer or reindeer herding is broad in scope. It covers all of the arctic portions of the world, and many varied aspects of the animal, the industry, and the people and problems that accompany the animal. The purpose of this bibliography is to bring together the most relevant literature sources that deal with the socio-economic and historical aspects of reindeer herding in Alaska. It is important to state the method by which this bibliography was assembled. Only by doing this can its strengths (and weaknesses) be evaluated critically by the reader. No bibliography is ever one hundred percent complete. Due largely to the limitations of time and human energy, and the scattered geographic location of the sources, this bibliography is no exception. Much more research is needed to bring together the sources that deal with other parts of the circumpolar world.

## Organization

There are a number of bibliographies that contain sources which deal with various aspects of reindeer herding in Alaska. These were consulted and the sources contained in them were examined and annotated when they were relevant to the research goal. The bibliographies themselves are included in the section of this bibliography of annotated sources (Section II). As sources were located, their bibliography, or references cited were checked for further sources. With increasing distance from the original source, some of the bibliographic sources became further removed from the original topic. They thus fell beyond the scope of this bibliographic research. This point was usually reached when a source in a bibliography had key words in the title that did not appear to be relevant to the social, economic, cultural or historical aspects of reindeer herding in Alaska.

Obviously, some of the bibliographies utilized were more helpful than others on the topics of concern in this bibliography. The sources in some of them are taken largely from popular journals or newspapers (Ricks n.d., DeArmond 1974). Others focused on a single type of sources, for example government publications (U.S. Government 1973, Rowe 1938) or were concerned with regions (VanStone 1968, Foote and McBain 1964) or topics (Sundborg 1942, Hippler 1970). The more generally oriented bibliographies were more helpful because of their wider scope (Arctic Institute of North America 1953-1971, Snodgrass 1968, Spiess 1975). A list of the bibliographies and the search tools used in the preparation of this bibliography is given in Appendix II.



To maximize the usefulness of this bibliography, it is organized into several sections. Section II is an annotated bibliography of the sources that are relevant to the social, economic, cultural and historic aspects of reindeer herding in Alaska. These sources are listed alphabetically by author, and by year under individual authors. The bibliographies which were consulted during the preparation of this bibliography are listed in this section also, with an annotation describing their coverage and contents. Section III is an annotated listing of the holdings at several major archives and other repositories. Many of these were examined personally by the author during the preparation of this bibliography. The holdings of the various files are briefly described. Section IV is a non-annotated list of sources that, from their titles, would appear to have some data listed to provide additional sources for the person interested in pursuing some aspect of reindeer herding further than the limitations of this bibliography. They are not annotated because they failed to meet one of several criteria. Many were difficult or impossible to locate so that they could be read and evaluated. Others appear in popular journals, magazines or newsletters. Previous experience with these sorts of publication has indicated that the quality of the data contained in them does not usually justify the time and expense of tracking them down.

Appendix I is a list of repositories that have unpublished or archival material that is relevant to the topic of this bibliography. A very helpful guide to these is Frederick (1966/67). His list of "caches of Alaskana" gives a brief description of the holdings at the

various places. In many of these descriptions, items that are relevant to reindeer in Alaska, or the people associated with the reindeer industry historically are mentioned. This makes locating these significant archival materials relatively easy. However, Frederick's article overlooks a number of important source materials. For example, the holdings in Record Group 22 at the National Archives, Records of the U.S. Fish and Wildlife Service contain many cubic feet of records relevant to the experiments conducted on Nunivak Island to crossbreed caribou and reindeer and the social problems on the Island which they produced; Record Group 126 Records of the Office of Territories contains significant data that are crucial to understanding the history of the problems with reindeer in Alaska during the 1930's and the eventual purchase of all non-Native owned reindeer and property by the U.S. Government in 1940. Such omissions are not to be unexpected in such a compilation as Frederick's. His topic in the 1966/67 article was much broader than the one which this bibliography focuses upon. No doubt additional bibliographic research at the libraries and archives mentioned by Frederick will uncover materials that are relevant sources for the study of socio-economic aspects of reindeer herding in Alaska.

Appendix II is a list of the bibliographies and search tools used during the preparation of this bibliography. No attempt has been made to cross-index the sources in this bibliography with their original bibliographic citation except in those cases where the annotation is taken from another annotated bibliography. In those cases, the source for the quoted annotation is given.



## Section II

### ANNOTATED SOURCES

Abrahamson, John D.

- 1968      Westward Alaska. The Native Economy and  
            its Resource Base.  
            Anchorage: Federal Field Committee for  
            Development Planning in Alaska.

This document traces the importance of fish, mammals and birds, reindeer, and minerals and mining in the economy of northwestern Alaska. The section on reindeer includes a brief history of the introduction and spread of reindeer in Alaska, the changing federal policies towards herd ownership and ecological aspects of reindeer herding and its attendant problems. The current situation is reviewed including the status and importance of reindeer in the local economy, the Nunivak Island herd, and the place of reindeer herding in the village and regional economy. Problems which must be recognized and solved include the need for federal inspection of the meat, the marketing stream of reindeer meat, and the various roles of the State of Alaska, the Bureau of Indian Affairs, and the Bureau of Land Management in areas such as marketing, research, and industry potentials.

Alaska History Research Project

- 1936-      Documents Relative to the History of Alaska.  
1938      Fairbanks: University of Alaska.  
            15 ms volumes.

The Alaska History Research Project aimed at annotating the major documents that are relevant to the history of Alaska. The fifteen manuscript volumes contain carbon copy pages of the various documents that were selected. The materials covered under the topic of reindeer include: A. C. Kinsley's General Report on Reindeer Investigations Kuskoquim, Alaska Area, 1931, material concerning the Trowbridge-Gillman investigation of 1932 and Roy Nash's report on the reindeer industry of Alaska 1933. While all these are important sources in themselves, the volume of material that is omitted far exceeds what has been included.

Alaska Planning Council

- 1940      Preliminary Economic Survey of the Seward  
            Penninsula Area.  
            Juneau: Alaska Planning Council.

Reindeer herding is considered within the context of the present and past use of the resources of the Seward Peninsula area. The geographic background, the people and transportation, mining, reindeer, fur trapping, native arts and crafts, and service problems are all presented. The role of government in the region, major economic and social problems and suggestions for their relief are given. The section on the reindeer industry was written by the General Reindeer Superintendent in Nome and is a balanced picture of the status, problems and potential of the industry. The author takes into account the different needs, goals and attitudes of the native versus the white (or profit-motivated) operators. Range conditions in the various grazing units are given, their potential evaluated, and overgrazing and tundra fires are cited as the prime causes for decreased range lands. The 97,844 reindeer in area are owned by 1,372 natives, although the grazing capacity is estimated at 141,700 animals and it is pointed out that all the natives in the region depend upon reindeer for meat and winter clothing. Export marketing problems are reviewed and the local market for reindeer products is evaluated. Suggestions for improvement of the industry in the form of predator control, improved local markets, teaching of trainee herders at the government schools, mapping and inventorying of range lands and more personnel for the Reindeer Service are made. The role of reindeer meat in fur farming operations is briefly mentioned.

Alaska Planning Council

- 1941      General Information Regarding Alaska.  
            Juneau: Alaska Planning Council.  
            (Revision of the U.S. Department of the Interior  
            booklet of the same title, 1931)

Designed primarily to provide information for prospective settlers, merchants and travelers in Alaska, this book gives a rosey picture of the geography, climate, resources, and opportunities in the Territory. The reindeer industry is presented in an unrealistic light, the recent (1937) Reindeer Act is characterized as a benevolent act on the part of the U.S. Government to aid the natives in their industry. The Eskimos are portrayed as nomadic in nature, and the formation of the reindeer stock associations is presented as if it were a native initiative to consolidate herding and management problems. The larger portion of the book is devoted to facts and figures on Alaska's industry, wildlife, land status, transportation, government, history and information for prospective settlers.



Alaska. State of  
Department of Fish & Game (various authors)

1959        Caribou Report: Annual Project Segment Reports.  
to date     Juneau: ADF&G.  
              (continuing series)

Some of these reports contain references to caribou and reindeer conflicts. Reindeer are usually mentioned as either having been captured by a migrating caribou herd or as competing with caribou herds for rangelands. The adverse impacts of snowmachines on caribou herds is also interestingly documented, starting about 1966.

Alaska. State of  
Department of Fish & Game

1974        Alaska Game Management Policies, State of Alaska.  
              Juneau.

The Commissioner of Fish and Game and the Alaska Board of Fish and Game have a subsistence utilization policy for the fish and game resources of the State. Basically, the Department of Fish and Game is devoted to the management of fish and game resources to provide sustained yields of the resources for human use and for the other wildlife populations (predators) that depend on them for food. The Department recognizes the existing cultures and lifestyles in Alaska as being of great value and that attempts to preserve them should be made. Policy is to manage caribou populations in such a way to benefit the people who utilize them most. When conflicts between the human users and the wildlife users occur, the predator population will be managed to minimize the conflicts. The Department recognizes that subjective judgements will enter into decisions about the allocation of wildlife resources to human users. "Cultures and custom, economic status, alternative resources (availability of social services), location, and voluntary choice of life style" are all factors which the Department will consider in making the allocations. It is undesirable from the Department's perspective to allow the expansion of reindeer herding or any animal husbandry, into areas that support naturally occurring populations of wildlife, particularly caribou.

Alaska. State of

- 1976 Alaska Regional Profiles. Northwest Region.  
Anchorage: Arctic Environmental Information and Data  
Center, University of Alaska.

This volume is one of a series of six designed to survey and compile the known resources of the regions of Alaska for land use planning purposes. The reindeer industry of northwestern Alaska is considered under range resources for the region. A brief summary of the history of reindeer in Alaska, their range requirements, and the current level of operations is given. In the section on the man-made environment, a chronology of reindeer herding and its historical importance to the region is outlined. Reindeer Reserve withdrawals and the changes in land ownership patterns resulting from ANCSA are discussed under the section on land status.

Alaska. Territory of. Office of the Governor

- 1884- Report of the Governor of the District of  
1958 Alaska to the Secretary of the Interior.  
(title varies)  
Washington, D.C.: U.S. Government Printing Office.

Over the years, the Governor's annual report has always had some mention of reindeer herding. Beginning in 1891 when Sheldon Jackson successfully brought over reindeer from Siberia to Unalaska and Amaknak Islands mention of the reindeer and their benefits to the Natives was strongly voiced in the Governor's reports. When the reindeer administration was switched to the Governor's Office from the Bureau of Education in 1929, the attention given to reindeer in the reports increased. After World War II there is less space devoted to the reindeer industry, aside from a casual reporting of the state of the industry. Data given in most of the reports includes numbers of animals, numbers in Native, non-Native, Missions' and Government control, particular problems during the previous year, disease research, grazing leases, personnel, and number of Natives involved with the industry. Observations on needed funds and personnel, growth potential etc. are also normally included.



Alaska. Territory of  
Alaska Planning Council

1938        Summary of Alaska Planning Council's Work.  
              Juneau.

This summary report includes reports from the subcommittees of the Planning Council on general and specific types of public land classification, forests and forest production, wildlife and reindeer range and industry. The Alaska Planning Council was formed as a purely advisory body of the Alaska Territorial Legislature in 1935. The preliminary report of the subcommittee on reindeer range and industry includes recommendations of government subsidy of the reindeer industry if it is to be a viable native enterprise, an adequate trained field staff to handle range use and herd management, range studies to determine the carrying capacity and forage type and complete range mapping to determine range boundaries and conditions.

Alaska. Territory of  
Department of Education

1920        Report of the Commissioner of Education.  
              Juneau.

In the first report of the Commissioner of Education for the Territory, the history of education in Alaska is reviewed. Russian education, the first American Schools, the mission schools of the various denominations, U.S. Government schools and the introduction of reindeer are discussed. Summary tables of Territorial education statistics are presented. The role of the U.S. Bureau of Education is summarized under five activities; the formal education of native children, social service in the native villages, medical service, reindeer service and co-operative stores.

Alaska. University of  
Cooperative Extension Service

1973        Reindeer and Caribou Recipes.  
              Publication No. 68, Cooperative Extension  
              Service, Fairbanks.

Pamphlet gives recipes for 21 different ways to serve reindeer and caribou meat. Cooking tips and nutritional information about reindeer and caribou and other Alaskan game (mammal) meats are also included.

Alaska. University of  
Institute of Social, Economic and Government Research.

1964        Agriculture in Alaska.  
              Alaska Monthly Review of Business and Economic  
              Conditions 1(3):1-5. July.

"Data on the reindeer industry and on native harvesting of game,  
fish, berries, etc. are included."

84942 in Arctic Bibliography 14:40. 1969.

Anderson, Douglas D.

1974/75    Trade Networks Among the Selawik Eskimos,  
              Northwestern Alaska During the Late 19th and  
              Early 20th Centuries.  
              Folk 16-17:63-72.

The author gives a description of how the Selawik Eskimos participated in an ancient aboriginal trade network that stretched from Siberia to Canada. An ethnographic sketch of the Selawingmiit who appear to have followed two different seasonal cycles, one on the lower river and another on the middle river is given. The social organization of the Selawingmiit traders, their trade routes and trade goods, and the methods of trading are presented. The environmental factors such as travel conditions and the availability of game determined the scheduling of trading in relation to the seasonal round. During the first decade of the 20th century the Selawingmiit traders transported goods for the government as it built schools and shipped supplies for the then-growing reindeer industry.



Anderson, H. Dewey & Walter C. Eells

1935 Alaska Natives: A Survey of their Sociological  
and Educational status.  
Stanford: Stanford University Press.

This massive report covering Alaskan natives' sociological and educational status mentions reindeer herding only peripherally to the present and recent economic conditions. A brief summary of the introduction of the herds to Alaska and their current condition is given. Given the then-current rate of increase, the authors predict that some Eskimos will become wealthy through reindeer herding, much like the "oil barons" of Indian reservations in Oklahoma. The obvious advantages of owning herds, such as a secure meat supply and possible monetary returns will, it is believed, convince others to become herders, and adopt the pastoral economy. Strong leadership of the Reindeer Service by qualified animal-husbandry experts, more than half-hearted financial support from the government and administration by the Office of Indian Affairs are recommended for the reindeer industry. The protection of the native interests and the development of the industry should be of prime concern at the same time as relationships with private industry are fostered.

Anderson, Robert T.

1959 Eskimo Reindeer Herding: a Problem in  
Applied Anthropology.  
Anthropological Quarterly 32(2):95-107.

"Reindeer herding practices in Alaska are compared with the Lapp's two basic types (extensive and intensive) and Lapp data used for a re-evaluation of Alaskan methods. Herding in Alaska has had three stages: 1892-1914 native ownership, 1914-1939 non-native ownership and commercial exploitation, since 1940 ownership restricted to natives with a lessening of commercialization. Negative aspects of all three stages, disadvantages of the "close" (herd followed continuously) and "open" (animals left to roam at large) methods, and drawbacks of both the individual and communal herd ownerships are discussed, reasons are given for the presentday return to old-style "close" methods. Traditional methods adapted to the Lapp family's migratory customs proved unsatisfactory and uneconomic to the (sedentary) Eskimos. For the latter a combination of communal and individual ownership is suggested."

#56501 in Arctic Bibliography 10:46. 1961.

Andrews, Clarence Leroy

1926 Reindeer in the Arctic.  
Pacific Northwest Quarterly 17:14-17. January.

"Contains a description of the reindeer industry of the area north of the Brooks Range, Alaska, including details of ice corrals and other local characteristics of the herding by Eskimos."

545 in Arctic Bibliography 1:120. 1943.

1935 Driving Reindeer in Alaska.  
Pacific Northwest Quarterly 26:90-93. April.

"Contains a summary of the drives, with distances of each, by means of which reindeer herds became distributed in various parts of Alaska (including the Aleutian Islands) after purchase in Lapland, 1898, for relief of miners and others."

535 in Arctic Bibliography 1:119. 1953.

1938 The Story of Alaska.  
Caldwell: The Caxton Printers, Ltd.

This history of Alaska was written by the man who served in the Bureau of Education and Reindeer Service in Alaska from 1923 to 1929. Reindeer are mentioned in connection with the relief of the miners on the Yukon in 1898, the introduction of schools and missionary activities and the value of reindeer to the natives and their economy.

1939 The Eskimo and His Reindeer in Alaska.  
Caldwell: The Caxton Printers, Inc.

"Contains a general account of Eskimo life in western and northern Alaska, with emphasis upon the reindeer breeding that was introduced in 1892. Based upon sojourns in Alaska by the author, particularly from 1923 to 1929 when he worked in the School and Reindeer Service. Includes descriptions of hunting seal, whale and caribou (by corralling)."

537 in Arctic Bibliography 1:120. 1953.

1944 Wm. T. Lopp.  
Alaska Life 7(8):49, 52-54.

"Story of the first school teacher (1891) at Wales, Alaska later supervisor of the Teller Reindeer Station and leader of the seven hundred mile trek overland to Point Barrow in 1898, driving reindeer for the relief of whalers stranded there without food."

558 in Arctic Bibliography 1:122. 1953.



Angress, Shimon & Charles A. Reed

1962      Annotated Bibliography on the Origin and  
            Descent of Domestic Animals, 1900 - 1955.  
            Fieldiana: Anthropology, volume 54, No. 1.  
            Chicago Natural History Museum.

Entries on reindeer are included in this bibliography and are  
quoted from the work as Angress & Reed.

#77043 in Arctic Bibliography 13:56.

Arctic Institute of North America (various editors)

1953-      Arctic Bibliography. Volumes 1-15.  
1971      Department of Defense and McGill-Queen's  
            University Press.

From the 101,599 books and papers abstracted since this bibliography  
began, several dozen relating to reindeer herding are included in this  
bibliography. The coverage of biological and physical sciences in the  
Arctic Bibliography is more complete than the coverage of the social  
sciences dealing with arctic research.

Arctic Institute of North America

- 1974      The Alaskan Arctic Coast: A Background  
Study of Available Knowledge.  
Prepared for the U.S. Army Corps of  
Engineers by the Alaska Office, Arctic  
Institute of North America, Anchorage.

This background report was prepared to describe the environment of the Alaskan Arctic Coastal Zone and the potential impact of oil exploration and development activities on the region, its inhabitants, and the environment. Reindeer herding within the area is examined briefly (pages 359-361), its past history sketched and its potential evaluated. The conflicts between caribou and reindeer in the region in the past are noted. Two major problems regarding the development of the reindeer industry are noted: 1) a means must be found to decrease the expenses of developing and harvesting a productive herd; and 2) educating the Natives who are by tradition hunters, to utilizing a food resource on a harvestable basis. The probable future significance of reindeer round-ups as a source for food and clothing is assessed as minor in both the social and economic contexts. Herding is contrary to wilderness ideals, reindeer may react adversely to manufacturing and extractive industries, as the scale of activity increases the potential for serious impacts on plant communities increases, major threats exist in the form of overgrazing and disruption of predator/ prey relationships as well as competition with native species (i.e. caribou) are among some of the anticipated impacts of resource use (reindeer herding) on the existing environment.

Bailey. A. M. & R. W. Hendee

- 1926      Notes on the Mammals of Northwestern Alaska.  
Journal of Mammology 7(1):9-28.

Article describes the specimens collected on a field trip to Alaska in 1921. Reindeer are classified as Rangifer tarandus and caribou as R. arcticus. Caribou are reported by natives of Wainwright to be scarce, especially inland towards the mountains, and the reindeer are increasing in numbers. The authors believe that with the dwindling caribou herds and the protection that the reindeer receive, the reindeer will become the dominant species. However, most of the natives of the northern villages ". . . still depend to a great extent on imported deer skins for clothing and on the sea mammals for the greater part of their food." (pps 21-23).



Barron, Alford Jake

1939        History of Agriculture in Alaska.  
             M. A. Thesis, Norman, Oklahoma.

This thesis traces the history of agriculture in Alaska from the Russian period to the mid-30's. The introduction traces a general historical outline of the topic, with a brief mention of the introduction of reindeer to the northwestern part of the territory. Other chapters deal with the establishment of Agricultural Experiment Stations and the labors of the early farmers, the climate and the various districts of Alaska, experiments at the stations after 1910, the rise of a permanent farming population, and the Matanuska Valley colonization project. The important work of Palmer, Rouse and others with experimental and practical work on cross-breeding reindeer, controlling insect pests and improving slaughtering, packing and transportation of reindeer products is largely overlooked.

Bartonek, James C., James G. King & Harvey K. Nelson

1971        Problems Confronting Migratory Birds in Alaska.  
             Transactions of the 36th North American Wildlife  
             and Natural Resources Conference: 345-361.

The use of migratory birds by Alaskans is discussed in the context of the varying land management schemes of federal and state agencies, the Alaska Native Claims Settlement Act and the Alaska Statehood Act. Migratory birds are impacted by the activities of oil and gas exploration and development, river basin projects, mineral and timber resources, reindeer, other livestock and agriculture, fur resources, subsistence and sport hunting, and other resources and developmental problems. The current state of information on numbers, distribution and habitat requirements of most species of waterfowl is inadequate for most management decisions. It is stated that reindeer sometimes eat eggs and trample nests and that future waterfowl losses could be reduced by controlled grazing.

Batchelor, Ronald F.

- 1962      Distribution and Abundance of Kodiak Island Feral Reindeer.  
Job Completion Report Research Project Segment,  
Federal Aid in Wildlife Restoration.  
Juneau, Alaska: Alaska Department of Fish &  
Game, Alaska Wildlife Investigations, pps 86-89.

Abstract and Recommendations (page 86).

"A population of between 500 to 700 feral reindeer presently inhabits the greater portion of southern Kodiak Island from Olga Bay in the south to the Kauluk River in the north. The Kodiak reindeer herd stems from an introduction of domestic stock made in the 1920's which rapidly increased to nearly 2,000 animals in the early 1940's, only to crash to approximately one quarter of that number in a few years. Aerial surveys conducted during the spring and fall served to delineate seasonal range and patterns of movement from wintering range in the north to the calving grounds in the south.

"Attention should be directed to bringing the large herds of feral reindeer inhabiting southern Kodiak Island under management as a game animal."

Bauer, Hubert Anton

- 1935      Problems of the American tundra.  
Arctic 3:107-113.

"Outline of the development of reindeer herds since their introduction in 1892; interests of the U.S. Government, the natives and the Lomen Company commercial prospects of reindeer as a source of meat, supply, marketing problems and the feed resources provided by natural pastures of the region."

1151 in Arctic Bibliography 1:203. 1953.

Bertholf, Ellsworth P.

- 1899      The Rescue of the Whalers; a Sled Journey  
of 1600 Miles in the Arctic Regions.  
Harper's Magazine 99:3-24. June.

"Account, by an officer of the U.S. Revenue Cutter Bear, of driving a herd of reindeer from Cape Vancouver, Kotzebue Sound to Point Barrow, Alaska, November 27, 1897 - September 13, 1898, for the relief of whalers. A full account of the exploit was published as a report of the cruise of the U.S. Revenue Cutter Service Bear, 1899".

1489 in Arctic Bibliography 1:252. 1953.



Bolton, Vera I.

1927      The Development of the Resources of Alaska,  
1912-1927.  
M.A. thesis, Department of History, University  
of Kansas.

Reindeer herding is considered within the context of other resources in Alaska, including agriculture, furs, fur seals, fisheries, forests, mining, minerals, transportation and the Federal and Territorial policies. A very brief review of the history of the herds is given, with glowing predictions about the future of the industry and its potential.

Boyd, William L.

1972      Jarvis and the Alaskan Reindeer Caper.  
Arctic 25(2):74-82.

This is an account of the reindeer drive from Seward Peninsula to Point Barrow in 1897-1898 by Lieutenant David H. Jarvis of the U.S. Revenue Cutter Bear. Jarvis, Dr. Call, and Lt. Bertholf and Dr. Lopp secured 448 reindeer which were driven to Barrow for the relief of the whalers stranded there that previous summer. They arrived on March 29, losing 66 on route, only five months since the plight of the sailors had become known to the outside world. From the reindeer brought to Barrow that were not killed for food, the reindeer herds of that region began under the supervision of the Presbyterian minister at Barrow, Dr. Marsh.

Brann, Harrison A.

- 1952 Bibliography of Sheldon Jackson Collection  
in the Presbyterian Historical Society.  
Journal of the Presbyterian Historical  
Society 30(3):139-164. September.

The article contains a biographical account of this Presbyterian missionary. Jackson was influential in Alaska from 1877 until 1908 serving as a missionary in Southeastern Alaska and traveling extensively. Finding the natives of northwestern Alaska deprived of their traditional food supply, Jackson undertook a program to establish a reindeer industry to benefit the Eskimos. He later served as the first General Agent of Education for the Territory and secured Congressional funds to aid the education of the Natives and the fledgling reindeer industry. An annotated list of the materials at the Society's Philadelphia library covers five topics: "1) correspondence relating to pioneer Presbyterian missions west of the Mississippi and Missouri Rivers; 2) the scrapbooks; 3) Jackson's diaries, journals, account books, travel journals, autobiographic cards, and books and articles by Sheldon Jackson; 4) photographs and drawings collected by Jackson in connection with and illustrating his work; and 5) the books, government reports and pamphlets which constituted his personal library."  
(Pg 158).

Brady, Judy

- 1968 The Reindeer Industry in Alaska.  
Alaska Review of Business and Economic Conditions  
5(3):1-20. September.

Article explains the current state of the reindeer industry in Alaska, with emphasis on the marketing and production problems. The historical course of the industry to its current situation is traced, characteristics of reindeer, herd management techniques, range management slaughtering and processing, marketing and transportation, the relationship between the native herder and the BIA, the administrative objectives of the state, BIA and BLM and accompanying conflicts, and the future of the industry are described. The article emphasizes the need for a state-approved slaughtering facility (which was built in Nome and became operational in October, 1968) and the need to overcome the irregular production of carcasses for the local and state-wide markets. Biological, managerial and cultural problems to be overcome, as well as economic factors, are discussed in the framework of a profit-oriented Native industry. The question of the legality of restricted Native ownership is raised, and the need to have a coordinated agency approach to the problems facing the reindeer industry is emphasized.



Brickey, James and Catherine

1975 Reindeer, Cattle of the Arctic,  
The Alaska Journal 6(1):16-24.

Article gives a history of the introduction of the reindeer to Alaska, the growth of the industry and the problems growing out of non-Native ownership of deer. Their treatment of the conflicts between Natives and non-Native owners is rather shallow, and ignores the historical development of the conflict, the abuses by non-Natives above and beyond the reindeer industry, and the numerous government investigations and internal management problems during the 1930's. The period after World War II is quickly glossed over and their present summary and evaluation of the industry weak. No mention of wolves as a serious problem to the industry in the 1930's and 1940's is made.

Brevig, Tollef Larson  
Johnson, J. Walter (compiler)

1944 Apaurak in Alaska, Social Pioneering Among the  
Eskimos, Translated and Compiled from the  
Records of the Reverent Tollef Larason Brevig  
Pioneer Missionary to the Eskimos of Alaska.  
Philadelphia: Dorrance & Company.

"A reminiscent account (written about 1929 with details drawn from his official day-book) of the author's (Apaurak's) life and work in northwestern Alaska whither he was sent by the U.S. Government as Norwegian-American Lutheran pastor to Lapp herdsmen brought to Alaska to train Eskimos in reindeer husbandry. He had charge of the mission and reindeer station at Port Clarence and Teller, 1894-1908 and 1913-1917 was also postmaster of Teller and government commissioner north of Nome. His chronicle mainly recounts in simple often anecdotal style the customs and attitudes of the Eskimos during a period when their traditional way of life was being fundamentally changed by association with the white man. It includes, however, passing remarks, occasionally contentious, on white men and their activities, development of his own mission's work, epidemics, the gold rush, Captain Jarvis' overland expedition in 1898 for the relief of whalers at Point Barrow, territorial government affairs, details of reindeer management and the sale of reindeer to the Lomen Co. in 1917, etc. The author's 72 illustrations are mainly from photographs of natives, reindeer and mission."

20892 in Arctic Bibliography 4:145. 1954.

Brooks, Alfred Hulse

1953      Blazing Alaska's Trails.  
Caldwell: Caxton Printers.  
(Second Edition, Fairbanks: University of  
Alaska Press. 1973)

This history of Alaska was written by a pioneer geologist who explored over 225,000 square miles of the Territory and mapped areas where no white man had ever set foot previously. The climate, geography and native tribes of the Territory are sketched, followed by over a dozen chapters on the history of the colonization, fur exploitation and early mining periods in Alaskan history. The use of reindeer for transportation is discussed and compared with that of dog teams; the work of the missions in regard to the introduction of reindeer to the Territory is presented. Brooks analyzes the work of Sheldon Jackson and finds many of his actions with the early reindeer industry to be illegal (giving deer to Lapps) and of questionable benefit to the Native peoples. The economic value of the herds is discussed. Brooks finds Jackson's greatest contribution to be his awakening the American public to the too-long neglected Territory in the north.

Buckley, John L.

1955      Wildlife in the Economy of Alaska.  
Biological Papers of the University of Alaska  
Number 1.: Fairbanks, University of Alaska.  
(revised 1957)

Wildlife plays a significant role in the economy of Alaska. This study attempts to place a dollar value on the use of Alaska's wildlife resources by both sport and commercial users. A mail questionnaire survey was used to obtain the data. Commercial fishing represented the largest dollar income from wildlife, followed by sport and subsistence hunting, fishing and trapping. Reindeer herding is considered as a lesser commercial value of wildlife along with walrus ivory and fur farming. The reindeer industry employs 250 people and has an estimated value of \$115,000. The estimated value of wildlife is found to exceed all other industries in Alaska based on natural resources by nearly 200%. The intangible social, esthetic and biological values of reindeer herding are not considered.



Burdick, Chas G.

1940 Report to the Secretary of the Interior,  
Reindeer Acquisition Unit, F. Y. 1940.  
Juneau: Alaska Native Service.

Chas G. Burdick was appointed Special Representative of the Secretary of the Interior to effectuate the provisions of the Reindeer Act of 1937. This Act called for the purchase by the U.S. Government of all non-Native owned reindeer in Alaska. Because of discrepancies between the number of reindeer claimed by non-Native owners and the estimates made by the Reindeer Service officials special round-ups and countings were made in 1939 to determine the number of reindeer and the value of the improvements (cabins, abattoirs, corrals etc.) that were to be purchased by the Government. The total appropriation was \$795,000. but the total costs of the acquisition program, including administrative were only \$491,602.20, leaving a balance of \$303,397.80. Burdick's report gives a sketch of the history of reindeer herding in Alaska, the use of reindeer by Natives, and the background to the passage of the Reindeer Act of 1937. The price paid for reindeer and improvements from the various owners is given as are the names of non-Native owners, the number of reindeer claimed in 1938, number purchased, price per head, and total cost. In summary 150,000 to 200,000 square miles of range land are estimated for Alaska with estimates of between 30 and 100 acres a year required to support one animal. Allowing approximately 60 acres per head, the carrying capacity for the range is determined to be 1,000,000 animals. Some of the economic, management and social problems of reindeer ownership and the industry are discussed in the final pages of the report. The organization of the personnel in the Reindeer Service and their qualifications together with a budget for personnel of \$80,000 per year is presented. A list of 21 recommendations for the proper organization and management of the industry concludes the report.

Burton, Wayne E.

- 1971 Alaska's Agriculture. An Analysis of Developmental Problems.  
Institute of Social, Economic and Government Research  
Report No. 30. Fairbanks: University of Alaska.

This study reviews the present status of agriculture in Alaska and appraises the future potential for an Alaskan agriculture industry. Reindeer are considered within the context of agricultural potential. Burton writes that the establishment of a single general goal and policy orientation must be the first step in a commercially viable reindeer enterprise. Within the structure of a single administrative authority, the direction and nature of research to aid the industry could be best accomplished. Previous fragmentation of expertise and authority has not alleviated any of the problems confronting the industry.

Callan, Bob

- 1946 The Lomens of Nome.  
Alaska Life, March pps 8-10, 35-37.

This popularly-written article traces the "hardships, adventures and colorful events" of the Lomen family and particularly Carl Lomen's involvement in the reindeer industry. The Lomen's are portrayed as benevolent benefactors to the Natives of northwestern Alaska by providing fair employment and a steady income with reindeer herding. From 1914 when he first acquired a reindeer herd until 1940 when Lomen and Co's herds and properties were finally purchased by the U.S. Government, Carl Lomen is depicted as the victim of misguided opposition to non-Native ownership of reindeer, government red tape and bungling delays, and financial problems not of his own making.

Cantwell, Lieut. John C.

- 1893a Alaska and the Reindeer.  
California Magazine 3(18):259-274. January.

Essentially a slightly expanded version of Cantwell's 1893b article, this article contains numerous line illustrations but little additional data.



1893b Introduction of Reindeer into Alaska.  
Chautauqua Magazine. Pps 562-568. February.

Article describes the conditions in northwestern Alaska; Native population depletions from starvation due to hunting of whales by American whalers, "rolling plains of moss covered tundra especially adapted by nature for the grazing of reindeer and useless for any other purpose", and the events leading up to the purchase of reindeer from Siberian herders and the establishment of herds at Teller and Port Clarence.

Courtright, Alan M.

1959 Range Management and the Genus Rangifer:  
A Review of Selected Literature.  
M.S. Thesis, University of Alaska, Fairbanks.

This thesis is divided into three sections: the first gives a general review of range management and caribou and reindeer, the second contains selected abstracts of relevant literature, and the third presents selected numerical and other tabulated data. It is difficult to determine the exact role of lichens in the ecology of Rangifer because of the nomadic nature of the animal on the one hand, and the lack of precise data on the winter nutrient composition of lichens on the other. The food requirements and preferences of caribou and reindeer need further investigation if the range is to be managed properly.

Crerar, T. A. & R. H. G. Bonnycastle

1936 Canada's Reindeer Experiment.  
Proceedings of the First North American  
Wildlife Conference, Washington, D.C.  
Pps 424-427.

"Contains an account of a movement of over 3,000 reindeer from the west coast of Alaska to the Kittigazuit area, east of the Mackenzie River delta. The transfer of the herd over a distance of 1,600 miles took five years. Details of the operation, preliminary studies and preparations, results, losses, gains (through fawning) etc. are presented and discussed."

39388 in Arctic Bibliography 7:164. 1957.

DeArmond, Robert N.

- 1974 Subject Index to The Alaskan, 1885-1907, A Sitka  
Newspaper.  
Gastineau Channel Centennial Association and Alaska  
Division of State Libraries. Alaska State Historical  
Library Historical Monograph No. 3.

Under the subject heading "Reindeer", 42 articles, editorials and reports are listed for the years 1891 to 1906. These are listed under the section, non-annotated sources.

DeLeonardis, Salvatore

- 1959 Reindeer Industry in Alaska.  
Alaska Call 1(6):9-10. November.

"Discusses the past, present and future of this industry from the viewpoint of a range conservationist for the U.S. Bureau of Indian Affairs. Reindeer were introduced between 1892 and 1902 as a domestic source of meat for Alaskan Eskimos; their numbers (estimated at 40,000) have fluctuated and management policies have changed several times. The industry is now administered by the Bureau of Indian Affairs but some 9,000 head on coastal islands are under the custody of the Bureau of Sport Fisheries and Wildlife. In 1958 the income from reindeer was approximately \$185,465. The Eskimos, traditionally hunters, have proved poor herders; storage, transportation and marketing have also posed problems. But the growing population and decline of certain other industries will increase the importance of reindeer herding."

#57584 in Arctic Bibliography 10:237. 1961.



Dimond, Anthony J. (Compiled by Paul McCarthy)

1968        Anthony J. Dimond. An Inventory of his Papers  
              in the Archives and Manuscript Collections of  
              the University of Alaska Library.  
              Fairbanks: University of Alaska Library.

Anthony J. Dimond was the Alaska Territorial delegate to the U.S. Congress from 1933 to 1945. The papers consist of his legislative, political and personal activities from 1904 in Valdez to the time of his death in 1953 in Anchorage. The bulk of the material in the Papers consists of material relating to his six terms as Territorial Delegate. Three boxes in the Political Correspondance and Public Works File (Boxes 30, 31, and 32) contain primary information relating to reindeer matters of the time. Correspondance with C. L. Andrews, the Lomen Reindeer Corporation, B. B. Mozee, and many others is included. Reindeer Bills and reports, notes, and correspondance are quite extensive. McCarthy has included a brief description of the contents in the University of Alaska Archives, a biographical sketch of Dimond, and a table of contents of the inventory of the Papers of Anthony J. Dimond.

Dodge, Stanley D.

1928        The Samoyed Culture. Papers of the  
              Michigan Academy of Science, Arts and Letters  
              8:1-9.

"Sketches the ethnic origin, economy, way of life, religious beliefs, tundra habitat, etc. of these people. The economic importance of the reindeer for their material culture is stressed,"

64220 in Arctic Bibliography 11:251. 1963.

Dutilly, Arthème A.

- 1949      A Bibliography of Reindeer, Caribou and Musk-Ox.  
Department of the Army, Office of the Quarter-master  
General, Military Planning Division, Research and  
Development Branch, Environmental Protection  
Section, Report No. 129: Washington, D.C.

This bibliography was designed to supplement the more general Arctic Bibliography. It contains over 2,000 entries on the three species, with an index, list of abbreviations used in the bibliography, technical and vernacular names of the animals, people engaged in the reindeer industry and ranges of the animals and extinct species. The Quarter-master Corps wanted the data available on the three species in order to provide for soldiers' food and clothing in arctic regions if normal supply lines should be disrupted or need to be supplemented. Technical biological accounts, popular hunting stories and non-English (Russian, Scandinavian and German) books, articles etc, are all included.

Federal-State Land Use Planning Commission for Alaska

- 1974      Summary of the Conference on Taking Fish and Game  
Resources to Meet Subsistence Needs.  
JF-SLUPCA: Anchorage.

The conference was organized to explore the questions relating to subsistence uses of fish and game. Multiple viewpoints are presented in the summary reflecting the individuals' viewpoints as representatives of Native groups, state and federal agencies and environmentalist or conservationist interests. Without coming to any formal conclusions as to ultimate policy or regulations concerning subsistence uses of renewable resources, the conference did start from a set of working assumptions. These were: "1) The need of the people for the resources in order to sustain life is accepted and need not be proven. 2) The need exists to identify, and where necessary give preference to the taker of resources to meet subsistence needs. 3) Subsistence taking must be accomplished under the law. 4) Any classification of subsistence takers under State law should be done on nonracial basis. 5) The renewable resources required for subsistence needs must be managed on a sustained yield basis and not all users or uses of these resources can be accommodated."



1976            Tentative Recommendations for National Interest  
April 26        Lands (d-2) in Alaska.  
                 JF-SLUPCA: Anchorage.

This 20 page brochure summarizes the Planning Commission's proposals for national interest lands in Alaska. The Commission has attempted to weigh the conflicts between scenic, recreational or non-developmental uses and mineral extraction. In addition, the needs of Alaskan Natives to have access to lands for subsistence uses has guided many Commission decisions. The net result is a series of d-2 proposals that place more lands into categories that would be open to mineral development than the proposals set forth by Department of the Interior agencies. Reindeer herding as a value is not mentioned in any of the listings of their proposals, despite the statement that "the resource values, land patterns, and human needs of the whole state have been carefully reviewed by the Commission in creating these tentative recommendations."

(See also Joint Federal-State Land Use Planning Commission for Alaska)

Flor, Fritz

1930            Haustiere und Hirtenkulturen.  
                 Wiener Beitr. Kultuges, und Linguistik.  
                 Inst. Völkerkunde, Univ. Wien. pp 1-238.

"This historical survey covers the origins of the domestic dog, reindeer and horse. The philological aspects are emphasized, but zoological information is considered. The author finds the cradle of the domestic dog (chapter 3) in the Protoeskimoid culture in arctic Siberia and associates with the rearing of the dog, the earliest breeding of reindeer (chapter 4) among the protosamojeds. The keeping of reindeer is considered to be the most ancient pastoral culture and it eventually gave rise to the domestication of the horse (chapter 6) in Asia by the Proto-Altaiian tribes."

Angress & Reed 1962:46.

Floss, Ludmilla

- 1967 Reindeer in Russia and the Scandinavian Countries.  
Washington, D.C.: U.S. Department of the Interior  
Library, Bibliography No. 6.

The items in this bibliography represent a survey of the current publications in Russian, Finnish and the Scandinavian languages. The majority of the items are not available in English translations, but a few are written in English by Scandinavian authors. Topical coverage includes reindeer breeding, feeding and nutrition, diseases and parasites, insect pests, industry, management, migration, pastures, meat and milk production and hunting and trapping.

Foote, Don Charles & Sheila K. McBain

- 1964 A Selected Regional Bibliography for Human  
Geographical Studies of the Native Populations  
in Central Alaska.  
Montreal: McGill University. Geography Department  
Publications No. 12.

As the title of this bibliography indicates, it is limited in geographic extent to the central Alaska area. Since reindeer herding has taken place by and large in the northwestern portion of the State, there are very few items in this bibliography that deal with reindeer. Valuable background sources are covered, as are a few sources on reindeer in interior Alaska.



Foote, Don Charles and H. Anthony Williamson

- 1966      A Human Geographical Study.  
In: The Environment of the Cape Thompson  
Region, Alaska. edited by Norman J. Wilimovsky  
and John N. Wolfe. United States Atomic Energy  
Commission, Division of Technical Information.

"Three groups of Eskimos, the Tigaragmiut at Point Hope, and the Naupaktomiut and Noatagmiut at Noatak, live within the area studied. About 1850 these people were little affected by contact with Europeans and Americans. From 1850 to 1885 American whalers caused important changes in the Eskimo way of life because they disrupted the basic ecological systems of the region. After 1885 a new pattern of Eskimo life began when Americans settled on the land as whalers, traders, missionaries, and government officials. The native economy became increasingly bound to the continental American market and the federal government. Eventually the three Eskimo groups centered their activities on the villages of Point Hope and Noatak. Today the seasonal activities of the two villages represent a balance between traditional hunting and the need to earn a cash income. In Point Hope about four-fifths of the village food demand is met by hunting and one-fifth by importing food. Local native foods are slightly more important in Noatak than in Point Hope." (Pg 1041). In 1908 two Eskimos and a Lapp established a reindeer herd at Point Hope, the herd at Noatak was established in 1910. The Point Hope herd grazed from the Kukpuk River to the Pitmegea River, the herds from Noatak grazed in the lower Noatak River area and the Mulgrave Hills. The herds increased in size, but trapping opportunities also existed. White fox skins went up in value from \$1 in 1900, to \$50 to \$55 in 1929. After 1929, the value of skins dropped to \$4 or \$5, and the reindeer herds declined in size through the 1930's. By 1946 the Point Hope and Noatak herds were virtually non-existent and the return of caribou to the region obviated the need for reindeer meat. Attempts to re-establish herding in the Noatak area since 1946 have not been successful.

Fortenbery, Donald K.

- 1974a      Migratory Birds, Raptors, and Endangered Species,  
Resource Inventory, Northwest Region.  
Resource Planning Team, Joint Federal-State Land  
Use Planning Commission for Alaska, Anchorage.

This report lists the known species of birds known to be resident in or migratory within the northwestern region of Alaska - Kotzebue and Norton Sound area, St. Lawrence Island and the islands off the coast of this region. Native subsistence uses of the birds is briefly mentioned, and no known conflicts between reindeer herding and waterfowl, or other types of birds is mentioned.

- 1974b      Migratory Birds, Raptors, and Endangered Species,  
Resource Inventory, Arctic Region,  
Resource Planning Team, Joint Federal-State Land Use  
Planning Commission for Alaska, Anchorage.

This report lists the species known to be resident or migratory within the three sub-regions of the arctic region - western Arctic, Colville area, and Eastern Arctic. Subsistence uses of the birds is given and there is mention of reindeer and their herdsman near Point Barrow who are believed to have destroyed the last snow geese in that area through their herding activities. Other man-bird interactions are mentioned such as the use of man-made debris by black guillemot for nesting sites.

Frederick, Robert A.

- 1966/67    Caches of Alaskana.  
Alaska Review 2(3):39-79.

This article gives a listing of library and archival sources of Alaskan history. The books, pamphlets, manuscripts, newspapers, transcriptions and pictorial collections of major United States and Canadian libraries and archives are briefly summarized as to their relevance for the study of Alaskan history. Frederick also notes several other compilations of Alaskana that had been made prior to his. Several collections include the papers of personal libraries and memorabilia of persons connected with reindeer herding in Alaska. Over three hundred institutions were surveyed in the preparation of this article including university, public and research libraries, state and federal archives, city and state historical societies and the libraries of state and federal agencies.

Fuller, Grace Hadley (compiler)

- 1943      Alaska: A Selected List of Recent References.  
Washington, D.C.: The Library of Congress,  
Division of Bibliography.

This bibliography is not annotated, and the coverage is spotty. Sources dealing with reindeer include some of the government reports issued up to 1943, popular journal articles and some scientific reports. The items dealing with reindeer in Alaska number twenty-three.



Gazaway, H. Prentiss & Edward L. Nygard

1963            Program Required to Establish a Successful  
Native-owned Reindeer Industry in Alaska.  
Bureau of Indian Affairs, Nome.

This 21 page document outlines the requirements to establish a Native-owned reindeer industry. Prepared by the area economist (Gazaway) and the Land Operations officer (Nygard) it draws on the experience of both men in the economic and range management problems associated with the reindeer industry. Ten observations concerning the industry include that reindeer are a benefit to the Eskimos in northwestern Alaska, individual ownership of herds works best, herds must be continuously managed and handled, a larger program on the part of the BIA is necessary to train these individuals who have the best chance of success in herding, and a grant or a long-term loan plus the usual stock loan is essential to rapidly establish new herds. The type of program recommended and the phases to implement it are presented, along with a rationale for the BIA's participation in such a program. A summary of previously made recommendations concerning staffing, funding and programs is given. Staff and an operating budget of \$260,000 are proposed which would enable the phases of an action program to begin in areas of range management and conservation, herd management and operations, herder selection and training, establishment of new herds and ranches, slaughter, storage and processing, transportation and communications, market development and the marketing of meat and by-products, research and education programs and planning and evaluation.

Georgeson, C. C.

1904            Reindeer and Caribou  
U.S. Department of Agriculture, Bureau of Animal  
Husbandry - Circular No. 55. Washington: USGPO.

Circular gives a description of reindeer and caribou their geographical distribution, races of caribou, and a treatment of the history, uses and potential of the reindeer industry in Alaska. Plans for the distribution of deer, improvement of the breed, sleds, and the diseases of reindeer are also discussed.

Getches, David

- 1975      What Can be Done to Salvage Subsistence Hunting and Fishing in Rural Alaska After the Alaska Native Claims Settlement Act?  
Anchorage: Alaska Native Foundation.

The paper contains sections covering the importance of subsistence uses of resources to the Native peoples of Alaska and the very real threat to the continued use of these resources as a result of Federal legislation and land management, State game management, and the profit maximization motive of the Native Regional Corporations. The report recommends that the State of Alaska assign high priority to the use of resources for subsistence use and take steps to protect that use. The Federal government should state a preference for subsistence uses of national interest lands and seek cooperative management agreements with the state, regional and village corporations for the subsistence use of national interest lands. The villages and regions must seek legal ways of protecting subsistence uses of their lands by one or a combination of the several ways open to them.

Gunn, Wade W. (compiler and editor)

- 1973      Bibliography of the Naval Arctic Research Laboratory.  
Arctic Institute of North America, Technical  
Paper No. 24.

The Naval Arctic Research Laboratory in Barrow, Alaska has a small library for the use of visiting and working scientific researchers. This bibliography is a listing of their holdings of books, articles, research reports and papers that present the findings of research sponsored by or conducted at NARL. Several items relating to reindeer herding are included, but the bulk of the items relate to biological and physical science research.



Hadwen, Isaac Seymour

1939        A Visit to the MacKenzie River Delta.  
Ontario Research Foundation, Bulletin 6(12):  
1-4. December.

"Report of a visit made at the request of the Northwest Territories Council, in the summer of 1939, to inspect the reindeer herd. Gives brief notes on diseases, parasites, increase and fertility of the herds, carrying capacity of the ranges, and the Eskimo herders."

6438 in Arctic Bibliography 1:974. 1953.

Hadwen, Isaac Seymour & Lawrence J. Palmer

1922        Reindeer in Alaska.  
U.S. Department of Agriculture, Bulletin No.  
1089. Contribution from the Bureau of Biological  
Survey. Washington, D.C.: U.S. Government  
Printing Office.

"Study of the biology of reindeer, ownership and utilization (meat, skins, milk), grazing and range management, predatory enemies, injuries and diseases, and parasites; with a check-list of Alaskan range plants (grasses, weeds, ferns, mosses, lichens, and fungi)."

6439 in Arctic Bibliography 1:974. 1953.

Hanson, Herbert C.

1952            Importance and Development of the Reindeer  
                 Industry in Alaska.  
                 Journal of Range Management 5(4):243-251. July.

In a critical overview of the reindeer industry, the author traces its history, the rise and decline in numbers, the present status and the future of the industry, along with numerous sound recommendations. The growth in numbers of reindeer "is typical of the growth of a population of animals in the absence of serious pressure by enemies such as predators, parasites and diseases . . . an important difference however . . . is the short duration of the equilibrium portion, and the practical absence of a period of oscillations and fluctuations following the leveling off. It shows instead an almost immediate decline after the maximum was reached. This indicates that the number of reindeer was permitted to increase far beyond the optimum in relation to the capacity of the areas occupied by them." The author makes recommendations concerning the future management of the industry including the locating of herds only in "areas where there is an adequate supply of lichens on the winter range and on the fawning range. . . where there is freedom from invasions by caribou, and where wolf control can be obtained when needed. The prevalence of diseases and insect pests also needs consideration. New herds should not be established until reliable, trained and cooperative operators and herders are secured. Regulations concerning the use of range and the management of the reindeer are in preparation and conformance to them under efficient supervision will be essential." Local markets rather than the export trade should be developed and supplied first. The native operator or the interested neophyte should be trained and encouraged to manage a herd and aided with technical assistance and administration, not with doles according to Hanson.



- 1953      Vegetation Types in Northwestern Alaska and  
Comparisons with Communities in Other Arctic  
Regions.  
Ecology 34(1):111-140.

As a result of three summers field work in northwestern Alaska, Hanson makes a preliminary classification of the vegetation into six physiognomic classes and 22 types. The types which occupy the largest land areas are the cottongrass-sedge-dwarf shrub-heath complex, sedge marshes, alpine Dryas, dwarf shrub, willow shrub, birch shrub and white spruce shrubs. Good lichen growths which are critical for the winter range of reindeer occur in the open forest types, open stands of the birch shrub type, the dwarf birch-heath-lichens type, and the cottongrass-sedge-dwarf shrub heath complex. Many areas have been depleted of lichens by overgrazing and fires. The classification is useful because it can be used in aerial surveys which also will yield information about the soil conditions associated with the plant communities.

- n.d.      Importance and Development of the Native Reindeer  
Industry in Alaska.  
Ms. on File at BIA, Juneau. (1952).

This manuscript is a report of research results by Hanson. Sections of it appear in his 1952 publication. The report gives consideration to the parts of Alaska that are suitable for reindeer range based on aerial surveys. Adequate winter range areas are listed, and a discussion of previous researchers work on plant forage nutrition, use and distribution is given. The summer herb-shrub range is abundant in Alaska, but the relative values of various areas is debatable. The winter lichen range is the chief limiting factor to expanding reindeer herding, along with predation and management problems. A short year-by-year history of the growth of the reindeer industry is presented. The reindeer in Alaska are shown to demonstrate the population growth characteristics of an animal population that is introduced into an area of abundant food, and no serious pressure from predators, parasites, or diseases. Hanson advises that the recommendations of previous men who have studied the industry be heeded. His own recommendations include more basic research on lichen growth and range characteristics, more personnel for the full-time management of the reindeer industry, the development of adequate local and export markets, and the training and recruitment of interested Natives for herders.

Hansen, Mildred Meiers

- 1965      Article on Reindeer Herding on Nunivak Island and an Interview with Dr. Fred Honsinger and Edward L. Nygard On the Utilization of Reindeer. Alaska Reporting Service, Report No. 259:5-12. October 11.

The reindeer slaughter on Nunivak Island took 2268 reindeer and the island's industry employs from 70 to a peak payroll of 121 people. Markets within the State and outside are discussed, and inspection problems relating to out of state shipments explained. The use of the BIA ship North Star for hauling reindeer meat is less expensive than hauling by commercial operators. Marketing reindeer meat according to Honsinger faces two different markets. The Native market likes fat carcasses, generally the front quarters for stew meat, whereas the non-Native market prefers a leaner meat which the hindquarters can provide. Three year old steers are optimum for marketing. Nygard explained that there are 4 BIA field personnel who are working primarily with the reindeer program, one each in Kotzebue and Bethel and two in Nome. A livestock marketing specialist in Juneau will work on marketing and basic biological and range research will be contracted with the University of Alaska. The role of the recently organized Northwest Reindeer Herders Association is discussed as are training programs in business management for the herders. Other topics discussed include Canadian and Scandinavian herds, disease, the role of other agencies, types of reindeer specialty meats, sausage, reindeer biology and habits, and mobile slaughtering facilities.

Hawkes, Ernest William

- 1913      Transforming the Eskimo into a Herder. An Account of the Reindeer Industry in Alaska. Anthropos Ephemeric. bd. 8:359-362.

"Brief descriptions of the origin, organization and incidents of the reindeer industry in Alaska."

#6780 in Arctic Bibliography 1:1025. 1953.



Hawkins, James E.

1956      The Kotzebue, Noatak-Kobuk Region, A  
Preliminary Economic Study.  
Juneau: Alaska Rural Development Board. December.

In a general way, the author traces the history, character, location and economic base of the Kotzebue Noatak-Kobuk region. The study had as its immediate aim the gathering of enough data to determine if the town of Kotzebue could incorporate under Alaskan law. Employment in various industries, including military construction, temporary labor in the villages, welfare and economic aid, and the reindeer industry are presented. Development of the industry will be slow according to the author until the factors of isolation, high costs of production and transportation are solved. Subsistence hunting and fishing is of primary economic importance in the region.

Heller, Christine A. & Edward M. Scott

1967      The Alaska Dietary Survey, 1956-1961.  
U.S. Department of Health, Education and  
Welfare. Public Health Service. Nutrition  
and Metabolic Disease Section, Arctic Health  
Research Center, Anchorage, Alaska.

"The diet of Eskimos has always been of interest because these people have managed to survive under adverse circumstances by utilization of unusual natural resources. Previous studies of Alaskan diets were limited to a series of weighted studies at Gambell and Anaktuvuk Pass by Rodahl; to a limited diet record study at Nikolski by Moorrees and a study based on one-day diet records from four Eskimo villages by Heller. "The present study was begun in 1956 with the following objectives: (1) To determine the present food habits of Alaskan Eskimos and Indians; (2) To estimate the degree of their dependence on local food; (3) To estimate the adequacy of the diet; (4) To predict medical or public health problems which might arise from inadequate diet." (Page 13) Eleven villages were studied, two Athapascan Indian (Huslia and Allakaket) and nine Eskimo (Point Hope, Noatak, Shishmaref, Shungnak, Akiak, Napaskiak, Kasigluk, Hooper Bay and Newtok). The use of reindeer meat in Noatak and Shishmaref is noted, but the exact contribution of reindeer to the diet is not given.



Heintzleman, B. Frank

1936 Alaska. In: The Western Range, 1936.  
Published as: 74th Congress, 2nd Session.  
Senate Document No. 199, Appendix. Pps. 581-598.

"Brief description of geographic and physical features, climate and population; analysis of land status; vegetation; agriculture; reindeer raising, wildlife and fire; with recommendations."

22498 in Arctic Bibliography 4:399. 1954.

Hiebert, Robin Ann

1969 Feasibility Studies - Spring and Fall Fisheries  
Development Plan. Native and Speciality Food  
Products Development Plan.  
Community Enterprise Development Corporation.

The purpose of the Community Enterprise Development Corporation is to provide seed money and technical assistance for developing Native cooperatives. This study outlines the technical aspects of a fall and spring fisheries program for western Alaska to market native food products and specialty items including moose, reindeer and caribou. Char, sheefish and whitefish, seals, walrus, whales and berries are all considered to be marketable commodities. Preservation methods including canning, and sauces and jellies are described. The feasibility of such an enterprise is believed to be supported by resources, logistic and economic investigation into the project. "The reindeer industry in Alaska is economically significant due to the extensive resource availability."

Hill, Richard M.

- 1967 Mackenzie Reindeer Operations.  
Ottawa: Northern Co-ordination and Research  
Center, Department of Indian Affairs and  
Northern Development, NCRC 67-1.

Reindeer were introduced into Canada from Alaska with a drive of 2,370 reindeer between 1929 and 1934. The Canadian reindeer industry has been faced with the same biological, social and economic problems as its Alaskan counterpart. R. M. Hill was manager of the Inuvik Research Laboratory and this report is based on his observations and experience there. Estimates of expenses and income are provided, as is biological and economic data on the herd. Historical data is included for background information only. Chapters include: reindeer products, market, range management, herd management, slaughter and packing, research, operation economics, and the future of the Canadian industry. Many figures, tables and graphs illustrate points made in the text concerning herd and range management and the economics of herding.

Hipler, Arthur E.

- 1970 Eskimo Acculturation. A Selected Annotated  
Bibliography of Alaskan and Other Eskimo  
Acculturation Studies.  
Fairbanks: Institute of Social, Economic and  
Government Research, Report No. 28.

This bibliography includes some of the better known references to the reindeer industry in Alaska with short annotations. The emphasis on acculturation studies narrows the focus of the selected references and as a result, many historically important items to the reindeer industry are omitted.

Hughes, Charles Campbell

- 1965 Under Four Flags: Recent Culture Change Among  
the Eskimos.  
Current Anthropology 6(1):3-69.

The social, economic, technological and political changes that have occurred within Eskimo societies in Greenland, Canada, Alaska and Siberia are examined in this article. The author gives an overview of the history of these changes and examines some communities in particular, as case studies. Little is mentioned about the reindeer industry, in Greenland or Canada. In Alaska, Hughes agrees with Lantis' assertion that, while successful in its early years, it has been a failure in the long run. Reindeer herding among the Siberians and its collectivization under Soviet management are described. Hughes poignantly analyzes the socio-cultural and psychological problems involved in cultural development in the arctic. The bibliography of materials related to the topic of contemporary and recent historic life among Eskimos is excellent.

Hyrenius, Hannes

- 1964 Metoder För Värdering av Renbetesmark - en  
Företagsekonomisk Studie. Methods of Evaluating  
Reindeer Pastures - an Economic Study. With an  
English Summary.  
Department of Statistics, University of Gothenburg  
Sweden, Publication 13.

Because of the increasing encroachment of developmental projects, such as hydroelectric facilities, on Lapp reindeer herders' land, the size of available grazing area was being reduced in northern Sweden. A formula for determining the value of the land lost to development was needed. This work develops such a formula, based on the normal return per head per year, the ratio between return per head and the amount of land used to support that herd, which yields the average grazing-value of the land area used to support the herd. The amount of land lost is then calculated. Previously rents paid for pasture leases, market value of the land, comparison with taxable values or some other method were used to determine the amount to be reimbursed to the herders. Lichen-bearing winter pastures are the permanent herd size determining factor (limiting factor) for all Lapp communities.



Jackson, Sheldon

- 1890 Report Relative to the Destitute Condition of the Natives of Alaska.  
S. E. Doc. 14, 51st Cong. 2nd Sess., in v. 2:  
2818. December. 5 pp.

This document outlines the conditions of starvation and poverty among the Eskimos of northwestern Alaska that Jackson hoped would bring pressure to bear on Congress to support his scheme for importing reindeer from Siberia to help civilize the Eskimos and give them an industrial skill. Congress did not act until two years later when the first appropriation for reindeer was passed. This was after Jackson had raised \$2,146 and imported the first 171 reindeer to Teller Reindeer Station from Siberia with the privately donated money.

Annual Report on the Introduction of Domestic Reindeer into Alaska, by Sheldon Jackson LL.D. General Agent of Education in Alaska.  
1st - 16th; 1890-1906. Washington: U.S. Government Printing Office. 1891-1908.

No reports published for the years 1891-92; two reports published for the year 1894. Last separate report, 1906. Since that date information in regard to Alaska reindeer service has been included in the annual reports of the commissioners of education.

Title varies: 1890, Introduction of Reindeer into Alaska. Preliminary report of the general agent of education for Alaska to the commissioner of education. 1893-1898 ... Report on introduction of domestic reindeer into Alaska... 1899-1906 ... Annual Report on Introduction of Domestic Reindeer ...

The reports on the introduction of domestic reindeer into Alaska were also issued as Senate Documents. As Senate Documents they received another set of identifying numbers, as follows:

- 1890 Introduction of Reindeer into Alaska. Preliminary Report of the General Agent of Education for Alaska to the Commissioner of Education. Report of the Commissioner of Education for 1888-1889. Washington, D.C.: U.S.G.P.
- 1893 Report on Introduction of Domestic Reindeer into Alaska.  
Senate Document No. 22. 52nd Cong., 2nd Sess.

- 1894 Third Annual Report on Introduction of Domestic Reindeer into Alaska.  
Senate Document No. 70. 53rd Cong., 2nd Sess.
- 1895 Fourth Annual Report on Introduction of Domestic Reindeer into Alaska.  
Senate Document No. 92. 53rd Cong., 3rd Sess.
- 1896 Report on Introduction of Domestic Reindeer into Alaska.  
Senate Document No. 111 54th Cong., 1st Sess.
- 1897 Report on Introduction of Domestic Reindeer into Alaska.  
Senate Document No. 49. 54th Cong., 2nd Sess.
- 1898 Report on Introduction of Domestic Reindeer into Alaska.  
Senate Document No. 30. 55th Cong., 2nd Sess.
- 1898 Report on Introduction of Domestic Reindeer into Alaska.  
Senate Document No.34. 55th Cong. 3rd Sess.
- 1900 Ninth Annual Report on Introduction of Domestic Reindeer into Alaska.  
Senate Document No. 245. 56th Cong., 1st Sess.
- 1901 Tenth Annual Report on Introduction of Domestic Reindeer into Alaska.  
Senate Document No. 206. 56th Cong., 2nd Sess.
- 1902 Eleventh Annual Report on Introduction of Domestic Reindeer into Alaska.  
Senate Document No. 98. 57th Cong., 1st Sess.
- 1903 Twelfth Annual Report on Introduction of Domestic Reindeer into Alaska.  
Senate Document No. 70. 57th Cong., 2nd Sess.
- 1904 Thirteenth Annual Report on Introduction of Domestic Reindeer into Alaska.  
Senate Document No. 210. 58th Cong., 2nd Sess.

- 1906 Fourteenth Annual Report on Introduction of Domestic Reindeer into Alaska.  
Senate Document No. 61. 58th Cong., 1st Sess.
- 1906 Fifteenth Annual Report on Introduction of Domestic Reindeer into Alaska.  
Senate Document No. 501. 60th Cong., 1st Sess.

Jenness, Diamond

- 1962 Eskimo Administration: I. Alaska.  
Arctic Institute of North America: Technical Paper No. 10.

Jenness wrote a set of five Technical Papers for the Arctic Institute of North America on Eskimo administration in Alaska, Canada, Labrador, Greenland and a retrospective volume of analysis and reflections. The Alaskan volume deals with reindeer in several contexts. There is a short history of their introduction and spread throughout the Territory, growth of the herds, conflicts with the Lomens and the contribution of reindeer herding to the acculturation of the Alaskan Eskimos. Jenness attributes the failure of the industry in the 1930's to poor management straying to join caribou herds, predation and the Eskimo herders dislike for the close-herding techniques of the Lapps which kept the herders away from their settlements for long periods of time. He is unclear as to what he sees for the future of the industry, but based on its past history, the prospects do not appear bright.



Johnson, Hugh A. & Harold T. Jorgenson

1963      The Land Resources of Alaska: A Conservation  
Foundation Study.  
College: University Publishers.

Upon achieving Statehood, Alaska's resources, development and future were much debated. This book inventories the land resources of the state, including minerals and petroleum, forestry and wildlife values. Reindeer are considered to be an agricultural resource, unique to the state. A brief history of the introduction, spread and growth of the herds, problems of native-non-native ownership and the crash of the herds in the 1930's are given. This serves as the background to a discussion of the needs and problems affecting the industry today. While stating that the industry should be rehabilitated, the authors conclude that it is a most complex problem to do so. The regional benefits will probably be confined to a few families in widely scattered areas. Confused management jurisdiction is cited as the greatest problem for the herders, and ADF&G is criticized for opening caribou hunting in Game Management Units 22 and 23 which contain most of the state's reindeer herds.

Joint Federal-State Land Use Planning Commission for Alaska

1974      Land Planning and Policy in Alaska. Recommendations  
Concerning National Interest Lands.  
Printed for the use of the Committee on Interior  
and Insular Affairs, 93rd Congress, 2nd Session.  
Washington: U.S. Government Printing Office.

This document sets forth the original recommendations of the Land Use Planning Commission. They estimate that some 60 to 70 thousand Alaskans, mostly Natives, utilize the fish, game, berries and other renewable resources of the state to meet subsistence needs. The Commission recommended that unless prohibited within the proposal areas, hunting, trapping, fishing, berrypicking, timber cutting for local consumption for fuel and home building and other subsistence activities should be permitted and that when a conflict between sport or commercial purposes and subsistence purposes arose, preference should be given to the subsistence user. In the Seward Peninsula area reindeer herding was recommended to be permitted throughout the withdrawal. In the Noatak, Kobuk and Selawik areas herding should be permitted but regulated to avoid conflicts with waterfowl habitat, particularly within the Selawik area. The reindeer grazing potential of the eastern Brooks Range area was considered low due to the probable losses to migrating caribou herds and the surface terrain of the area. No single overriding use of the Yukon-Kuskokwim Delta area should be identified. The Delta area has a carrying capacity of 4,000 to 5,000 reindeer. Hagemester Island is currently under lease for reindeer grazing and should be allowed to continue. The Committee finds no conflicts between reindeer grazing and seabird or walrus habitat due to their spatial exclusiveness. Mining is not incompatible with reindeer grazing provided that there is no extensive disturbance of the tundra cover.

Klein, David R.

1959 Saint Matthew Island Reindeer Range Study.  
U.S. Fish & Wildlife Service, Special  
Scientific Report: Wildlife No. 43.  
U.S. Government Printing Office: Washington, D.C.

"Account of a study made on the island (60° N 172° W in Bering Sea) during the summer of 1957, with information on its topography and weather. History and development of the herd, its physical condition, the range and its use in summer and winter are treated in turn. The herd was found to have grown from 29 head in 1944 to 1,350 in 1957 causing an overutilization of the range."

59220 in Arctic Bibliography 10:526. 1961.

1970 Tundra Ranges North of The Boreal Forest.  
Journal of Range Management 23(1):8-14.

This article describes the quantity and quality of range in tundra regions as being high in quality but greatly dispersed. Snowfall significantly affects the abundance and distribution of forage plants for caribou, reindeer and musk-ox. Sedges, shrubs and lichens are the important plant species of the forage. The crash of the domestic reindeer herds in northern Alaska from 650,000 animals in 1932 to approximately 25,000 by 1950 is blamed on range deterioration, poor herding practices and the confused status of ownership. Social and economic barriers to successful Native reindeer herding include lack of a tradition of pastoralism among the Eskimo, the absence of a profit motive, and the better education and acculturation trends among younger Eskimos. The legal status of restricting ownership to Natives may complicate future industry development, but recent increased sales of hides and the sale of horn to the orient for its "medicinal" value may make the market potential greater in years to come. The nutrition and growth of arctic mammals is discussed in relation to the annual cycle of available food and climatic regime. The control of population sizes under natural and artificial (humanly-altered) conditions is discussed. Herding of reindeer and muskox may prove successful on a local basis, but wild populations of caribou and muskox are felt to offer the best potential for productive use of the tundra for man's needs.



Koppers, Wilhelm

1932        Konnten Jägervölker Tierzüchter werden?  
Biol. gen., Bd. VIII, pp 179-186.

"In a brief discussion of the beginnings and motives of animal domestication the author holds that hunting tribes were the first breeders, that the first domestic animals were reindeer and horse, and that the cradle of domestication was the subarctic region of inner Asia; the motives were mainly practical and economic."

Angras & Reed 1962:65.

Lantis, Margaret

1950        The Reindeer Industry in Alaska.  
Arctic 3(1):27-44. April.

"Documented analysis and history of the reindeer in Alaska from 1892 when the government imported domestic reindeer; Eskimo husbandry from government and mission auspices; commercial exploitation by Alaskan companies 1914-1939; and since 1939 the rehabilitation of the reindeer industry for the benefit of the Eskimo by the Reindeer Service of the Alaska Native Service. Includes discussion of herding problems: coast-dwelling Eskimo's adaptation to inland herder's life, forage, pests, predators; technical and economic problems of slaughter and marketing meat, use of hides, etc.; data on size and distribution of herds. Remarks on Eskimo's interest in the reindeer business and ten recommendations for development of herds, exploitation of local markets for reindeer products, and restriction of reindeer business to Native peoples for 15-20 years."

#23655 in Arctic Bibliography 4:579. 1954.

1952        Eskimo Herdsmen: Introduction of Reindeer  
Herding to the Natives of Alaska.  
In: Human Problems in Technological Change -  
A Casebook. Edward H. Spicer (editor).  
New York: Russell Sage Foundation.

A brief sketch of the history of the introduction of reindeer into Alaska, the technical problems of herding and range management and the Eskimo attitude towards herding are given. The chief problem facing the industry as Lantis sees it, is the question of herd ownership. The factors in favor of and against individual ownership versus communal ownership by each Eskimo village in the form of an association are presented and discussed. Individual ownership of the herds is suggested as the best system, in the context of Eskimo acculturation and needs.



1972      Factionalism and Leadership: A Case Study  
            of Nunivak Island.  
            Arctic Anthropology 9(1):43-66.

Lantis summarizes the traditional leadership roles on Nunivak Island to place the changing roles of the period 1940 to 1960 in historical perspective. A review and analysis of the basis for and the development of factions and differing leadership positions from 1940 to 1960 is then presented. The Christian church, village council and reindeer project on the Island presented the greatest opportunities for young leaders to emerge. Factions made up of four groups are described for 1961: the church and reindeer project factions, the independent people who were innovators and the independent people who followed more traditional ways. Lantis concludes that all Nunivakers were attempting to acquire the material goods offered by Western society, and that recognition and acceptable social status in the larger Alaskan society were being pursued. The means to achieve these goals differed among the various social factions.

Laufer, Berthold

1917        The Reindeer and its Domestication.  
              Memoirs of the American Anthropological  
              Association, No. 4.

"On the basis of ethnographical data (Russian and early Chinese sources) an attempt is made to determine when and where reindeer breeding originated. It is concluded that the first domestication of reindeer took place in the Baikal region and was practiced originally by the Samoyeds in the early part of their history (prior to their migration into the present northern habitats). It was later transmitted to the Lapps."  
pps. 91-147.

Angriss & Reed 1962:68.

Lazell, J. Arthur

1960        Alaskan Apostle: The Life Story of  
              Sheldon Jackson.  
              New York: Harper.

This is a semi-biographical account of Jackson's life and works. It covers the missionary and educational activities of Jackson both in and out of Alaska. Several chapters are concerned with the importation of reindeer from Siberia and Jackson's efforts to establish the reindeer industry in Alaska. His political activities within the Presbyterian Church and with allies in the Federal Government is chronicled, as is his friendship with Governor John Brady of Alaska, a former Presbyterian minister himself. The establishment of herds at Teller, the drive of reindeer to Circle, and the procurement of Lapp herds and herders is also presented.

Leeds, Anthony

1965 Reindeer Herding and Chukchi Social Institutions.  
In: Man, Culture and Animals. Anthony Leeds and  
Andrew P. Vayda (eds) Publication No. 78 of the  
American Association for the Advancement of Science  
Washington, D.C. Pps 87-128.

Leeds outlines a model of the interaction between the ecological situation among the Chukchi and their social institutions. He finds a very close fit between the ecologically determined requirements for successful reindeer herding and the institutional and ideological aspects of Chukchi culture. He demonstrates how these "cultural equilibrating mechanisms" operate to keep the rangelands, animal numbers, and human population sizes within a certain range of variation. The minimum limits for herd size, maximum limits and the natural and cultural means for reaching them are discussed. The problems faced by a herder with a small herd are compared with those faced by a herder with a large herd. The role played by men, women and children within the herding system practiced by the Chukchi are examined to demonstrate their close relationship with the exigencies of reindeer herding. Leeds concludes by saying that Chukchi social institutions, reinforced through their ideological system "... serve to redistribute resources in reindeer as environmental conditions warrant, in an elaborate system of herd joining and herd division." Further the system is geared to the short and long term fluctuations in the environment, and the labor needs of a reindeer herding economy.



Lent, Peter C.

1966      The Caribou of Northwestern Alaska. In: Norman J. Wilimovsky and John N. Wolfe (editors). The Environment of the Cape Thompson Region, Alaska. United States Atomic Energy Commission, Division of Technical Information. pages 491-517.

"The caribou population of northwestern Alaska (between 160,000 and 200,000 individuals) occupies an area of up to 140,000 square miles at the time of its maximum dispersal in midwinter. During the migration in April and May, the cows converge upon a definite calving area in the northern foothills of the Arctic Slope. Here the calves are born, primarily between May 25 and June 15. After the initial calving-season mortality, the percentage of females over 24 months with calves was 73 in 1960, 42 in 1961, and 53 in 1962. In July, 1961 these females over 24 months old were estimated to be 47% of the population excluding the calves (about 61,000 cows). An unusually low natality was recorded in 1961. After reaching a maximum concentration at the end of June, the population undergoes further movements and dispersals, reaching approximately the winter distribution by November." (Pg 481 author's abstract). A description of the history of the herd and its use by Eskimos is given, as is the taxonomy of the species. A description of the study area, study procedures and seasonal movements (with maps) follows. The reindeer industry is "a good example of the unsuccessful utilization of the arctic environment. . . failure of this industry has been due to social and economic factors as well as overgrazing of the range." Efforts to improve the reindeer industry should be confined to south and west of the Buckland River, where fresh meat is needed, caribou would not interfere with the reindeer herds, and the risks of passing contagious diseases from one to the other would be reduced.

Leopold, A. Starker & F. Fraser Darling

1953      Wildlife in Alaska - An Ecological Reconnaissance.  
New York: The Ronald Press Company.

This book contains the results of the authors' field investigations in Alaska in the summer of 1952. Caribou, moose, and reindeer are reported on in relation to their range and its condition, and what man and animal are doing to the range. The authors attribute the decline in the reindeer herds primarily to range degradation from overgrazing and secondarily from burning. Predation, lapses in herding and straying to caribou herds also contributed to the herds' decline. Despite the dim prospects for the industry in the immediate future, the authors conclude that it can be managed back to a point where it contributes substantially to native Eskimos. Close range supervision through the Alaska Native Service and light stocking of the ranges are recommended. The intensive grazing of reindeer ranges in western Alaska is cited as the cause for caribou's failure to return to what were once prime winter ranges. Direct kill by hunting, changes in the range and changes in predator pressure are cited as the leading causes for caribou decline, but change in range is the single largest contributing factor. The importance of the interrelationship between caribou and reindeer is stressed, and more research on all aspects of the animal's ecology and life-cycle are called for.

Lipps, Oscar H.

- 1936 Eskimo Villages Along the Coast and on the Islands of the Bering Sea. A Report on their Economic and Social Condition. Report by the Field Representative of the Commissioner of Indian Affairs. Ms (47 pps) on file at the National Archives Building, Washington, D.C. Records of the Bureau of Indian Affairs, Record Group 75. Records Concerning Alaska Reindeer Service, 1939-42, 1950-53.

Lipps was sent to Alaska to see whether the Indian Reorganization Act of May 1, 1936 which extended the provisions of June 18, 1934 Act could be applied to the Indians, Aleuts and Eskimos of Alaska. Lipps spent the summer traveling to Golovin, Elim, St. Michael, Unalakleet, Shaktoolik, Solomon, King Island, Teller, Wales and Little Diomed Island. Most Eskimos he reported, wanted to secure cooperative stores in their villages to escape the traders extended credit system. He discusses Nome as the center of northwestern Alaska and its attraction to villagers, the distribution of Alaskan Eskimos, products and resources, the question of reservations, the application of IRA to the Eskimos and the Eskimos' reindeer industry. The Eskimo owners are reported to be concerned over the "demoralized condition of the present system of reindeer management" and that the benefits of the IRA cannot be extended to the Eskimos' reindeer industry until charters of incorporation are received, and cooperative reindeer associations are formed. Native management of herds and ranges is endorsed as is a training program in reindeer husbandry and management to maintain even ownership and continued family interest through individual ownership. Further study of the entire question of Eskimo education, economy, and organization is suggested.

Little, Arthur D. Inc.

- 1963 An Evaluation of the Feasibility of Native Industry in Northwestern Alaska. Report to the U.S. Department of the Interior Bureau of Indian Affairs. C-64870.

The feasibility of establishing a commercial reindeer operation, fur farming and hide tanning and pelt dressing operations was investigated from an economic viewpoint in this study. The study concludes that the current number of reindeer are too small and widely scattered to be economically viable at this level, but that they are sufficiently large to warrant re-examination of the commercial feasibility. Substantial markets in the lower 48 and outside western Alaska are not likely until and unless reindeer meat can compete on a cost basis with other meats. Major difficulties of the current operation are assessed. Recommendations include a three phase program to implement an economically viable herding operation.



Loss, Leo M.

- 1967 A Study of Technological and Economic Problems,  
State of Alaska.  
Institute of Social, Economic and Government  
Research, Report No. 13, University of Alaska  
Fairbanks.

"The production of reindeer meat is peculiar to Alaskan agriculture, and in 1966 brought cash receipts to producers of \$168,000. Under Federal law only natives are allowed to own private reindeer herds, of which there are now 15 to 20, and the Bureau of Indian Affairs administers the reindeer industry. Currently there are over 40,000 reindeer in Alaska." (Pg 95). Long range general economic problems of Alaska are identified as: low population living in a large and geographically diverse area; high consumer prices due to lack of competition, operating costs that are higher than in the lower 48, and inefficient business operations; lack of technical and scientific information and expertise within the state.

Lomen, Carl Joys

- 1919 The Camel of the Frozen Desert.  
National Geographic Magazine 36:538-556.  
December.

"Popular account of the importation in 1892, of the first reindeer to Alaska, its history since that time, description of its physical characteristics and habits, and of the uses made of its skin and meat."

10318 in Arctic Bibliography 2:1539. 1953.

- 1954 Fifty Years in Alaska.  
New York: D. McKay Company.

"Popular account of the author's life in Alaska, from 1900 to about 1950 and his family's part in the development of the reindeer industry. He describes his first few years as a gold miner near Nome, the town of Nome in the early twentieth century, the Lomen drugstore; importation of reindeer and Lapp herders; purchase of 1,200 reindeer by the Lomen's in 1913 and the succeeding industry; the reindeer drive from Alaska to the arctic coast of Mackenzie District 1929-1935; conflict and negotiations with the U.S. Government, and final separation of the Lomens from the reindeer industry about 1940."

41114 in Arctic Bibliography 7:447. 1957.

Lomen, Gudbrand J.

1920        The Reindeer Industry in Alaska.  
              Journal of Heredity 11(6):243-252. July-August.

The author gives a brief resume of the history of the introduction of reindeer into Alaska, a description of the animal, its habits and some of its characteristics. At the present rate of increase, it is believed that Alaska can sustain 10,000,000 reindeer in less than twenty years. Scientific breeding experiments are to be conducted by the Bureau of Biological Survey to improve the reindeer stock, relieve the animals of pests and parasites, and to exterminate or control the predators. More than enough meat for local demands is reportedly being produced, and Lomen & Company's major difficulties are long drives to bring the animals to shipping points equipped with cold storage facilities, and the lack of refrigerator boats.

Luick, Jack

1973        The Cantwell Reindeer Industry, 1921-1928.  
              The Alaska Journal 3(2):107-113. Spring.

The article traces the story of the U.S. Government's unsuccessful attempt to establish a reindeer industry in interior Alaska along the Alaskan railbelt. William T. Lopp, Superintendent of Education for Natives in Alaska Bureau of Education, made the decision to establish the herd. Earl Forrest, Superintendent of the Western District was to start the drive of 1,162 deer from Goodnews Bay and Akiak. Ben B. Mozee was to assume responsibility of the herd and the five herders at Akiak for the drive across the Alaska Range and on to Cantwell. Between October 27, 1921 and August 9, 1922 the herd was driven through unknown territory in the interior with a loss of very few reindeer along the route of some 1,200 miles. The herd in the Cantwell area was subjected to predation pressures, disinterest on the part of herders who preferred hunting caribou to herding reindeer, and lack of strong government support. The reindeer industry in the Cantwell area was turned over to an organization of Native herders by the Government in April, 1928. By that winter, the herd had joined indigenous caribou herds, the herders having abandoned them for high wage labor on the Alaska Railroad.

Manville, Richard H. & Stanley P. Young

1965      Distribution of Alaskan Mammals.  
Bureau of Sport Fisheries and Wildlife, Circular  
211. Washington, D.C.: U.S. Government Printing  
Office.

A brief discussion of the biology of reindeer and its relationship to caribou is given. The history of the introduction of reindeer into Alaska, their growth and spread throughout the state and their subsequent decline and the reasons for the decline are presented. A map showing the distribution of reindeer stations in 1919 is included in the article.

Miller, Max

1935      The Great Trek; the Story of the Five Year  
Drives of a Herd of Reindeer Through the Icy  
Wastes of Alaska and Northwestern Canada.  
Garden City, New York: Doubleday, Doran & Co., Inc.

"Popular account, based on records, charts and other data furnished to the author by the Lomen Brothers who had contracted with the Canadian Government to deliver 3,000 head of reindeer to the Mackenzie flats. Describes the course of the drive from the Kotzebue Sound region, north and eastward, happenings along the route among the herd and its Lapp and Eskimo attendants, 1929-1934."

11469 in Arctic Bibliography 2:1710. 1953.



Miller, Ross L. & W. S. Miller

1964  
November Preliminary Proposal to Organize, Coordinate  
Implement and Accelerate the Development of  
Alaska's Reindeer Industry.  
mimeo, 6 pages.

This proposal outlines the steps needed to modernize and expand the reindeer industry. The program objectives are defined, and the premises under which such a program could take place are made explicit. Primary areas of need are seen in a slaughtering facility, marketing of reindeer products and inspection, and full utilization of the range potential which was estimated at 90,000 thirty years previously. New criteria for the determination of grazing capacity are called for. A course of procedure calling for 1) definition of the idea; 2) evaluating the idea; 3) securing a sponsor; 4) determining feasibility and; 5) promotion is presented. The first two steps are considered to have been accomplished; sponsorship can come from S.B.A. 502 and long term, low interest financing. It is believed to be feasible to operate a commercial reindeer industry on the Seward Peninsula; both biologically and economically. A coordinated policy statement from the State is called for, with the roles of State and Federal agencies clearly defined.

Mirov, N. T.

1945 Notes on the Domestication of the Reindeer.  
American Anthropologist n.s. 47(3):393-407.

"Early records and archaeological evidences of the distribution of the reindeer in past and present times are summarized, and previous investigations on the origin of reindeer-breeding are critically reviewed. A map visualizing the recent distribution of reindeer is added."

Angress & Reed 1962:77.

Morlander, Lona E.

1936 Arctic Round-up.  
Alaska Sportsman 2(12):6-7, 18-19. December.

"Description of the annual reindeer round-up and butchering by the natives of Kivalina between Kotzebue and Point Hope on the northwest coast of Alaska." Lona Morlander was the wife of the Kivalina school-teacher and reindeer supervisor.

11743 in Arctic Bibliography 2:1749. 1953.

1939 Arctic Reindeer Camp.  
Alaska Sportsman 5(5):18-20, 22. May.

"Description of herding, care, enemies and habits of reindeer in northern Alaska, based on a visit to a camp at fawning season in May along with some Eskimos from Kivalina, northwest coast of Alaska."

11742 in Arctic Bibliography 2:1749. 1953.

Moze, Ben B.

1933 The Reindeer Problem in Alaska.  
Nome, Alaska (privately published).

Moze served over 22 years in Alaska, sixteen with the Department of the Interior as teacher, district superintendent of educational, medical and reindeer work and over four and a half years as General Reindeer Supervisor for Alaska. The book reviews the findings of the Survey of the Alaska Reindeer Service and points out several important needs which the Survey ignores in the field of reindeer management. Throughout Moze alleges that the field investigators performed their assigned task inadequately, that they catered to the Lomen interests in reindeer industry matters and that the Lomen interests were deliberately attempting to undermine the system of Government supervision of reindeer herding operations through the use of political influences within Alaska and in the Federal agencies. A brief history of the introduction of reindeer into Alaska, the growth of the industry and the accompanying policy regarding herding is presented. The findings and recommendations of the field investigators as published in the Survey are criticized point by point and found generally to be lacking in matters of fact, presentation and interpretation.

Müller-Wille, Ludger & Pertti J. Pelto

1971 Technological Change and its Impact in Arctic  
Regions: Lapps Introduce Snowmobiles into  
Reindeer Herding.  
Polarforschung (W. Germany) 7:142-148. November.

"Introduction and application of the small versatile snowmobile in reindeer herding in northern Finland (Utsjoki and Inari parishes) adaptation of work organization to the new ecological conditions, and impact of mechanization on reindeer herding and on the native population (social change) are described. Material on the adoption of snow vehicles in the Canadian Arctic is taken as a comparison." (Pg 142 author's summary).

Nygard, Edward L.

- 1965 Reindeer Ranching in Alaska.  
Paper presented at the 18th Annual Convention  
American Society of Range Management.

This short paper gives a history of the introduction, spread and eventual decline of reindeer in Alaska, the reasons for the decline, and the current status of the reindeer industry in Alaska. Some biological characteristics of the reindeer and the range requirements for a herd are presented. The Nunivak Development Project is described. Nygard cautions that programs designed to aid the reindeer industry must be planned to fit in with the Eskimo value system and must seek local participation in the formulation of the program.

Olson, Dean F.

- 1969 Alaska Reindeer Herdsmen. A Study of Native  
Management in Transition.  
Institute of Social, Economic and Government  
Research, SEG Report Number 18. Fairbanks:  
University of Alaska.

This report analyzes the use of Alaskan reindeer as a Native resource. The Eskimo reindeer herder is seen as a person caught between two cultures. The historical role of the herder from the introduction of reindeer into Alaska up to the time of the study (1968) is examined. The herdsman's role as a resource manager is examined from an economist's viewpoint. In conclusion Olson believes that central processing and specialized production of reindeer products, which are essential to an economically viable industry, will destroy " . . . the reliance and credit networks, and hence, the social pleasures of ownership."

- 1969 Reindeer Ownership in Alaska.  
The Polar Record 14(92):629-635.

Article describes reindeer herding as being a resource overlay to the traditional subsistence activities and social networks in north-western Alaska, the history of reindeer ownership in Alaska, Eskimo ownership in 1968 and the future of Eskimo reindeer ownership. Reindeer were owned by less than ten Eskimo families during the first twenty years of the program; the change to joint stock ownership in 1925 proved to be unsuited to the traditional concepts of resource ownership and management. Since 1945, eleven Eskimo owners grazed about 17,690 reindeer on Seward Peninsula. Occupational specialization in reindeer herding is not compatible with other seasonal activities according to Olson and combined with the traditional problems of grazing rights, range trespass, insect harassment and predation places reindeer herding in an unfavourable position to attract economic interest.



1970 Cooperative Ownership Experiences of Alaskan  
Eskimo Reindeer Herders.  
Human Organization 29(1):57-62. Spring.

Olson attributes the failure of cooperative reindeer herding in Alaska to the interplay of four factors; ecological, cultural, historical and the habits of the reindeer herds. A short history of reindeer stock associations follows a synopsis of the introduction of reindeer into Alaska by Dr. Sheldon Jackson in 1892. The article suggests that: ". . . (1) stock ownership necessitates a level of abstraction in ownership that was alien to the Eskimo and could not be fully undertaken or adopted and (2) cooperative ownership was at best an attempt to replace traditional problem-solving mechanisms with techniques which in themselves were not adapted to the nature of the situation or to the cultural setting." (page 62).

Paine, Robert

1964 Herding and Husbandry: Two Basis Distinctions  
in the Analysis of Reindeer Management.  
Folk 6(1):83-88.

Using the data from the Norwegian Rural District of Kautokeino in the province of Finnmark, the author defines the distinction between herding and husbandry in reindeer management among Lapps. Herding involves the day to day work on seasonal pastures and the movement of reindeer between summer and winter ranges. Husbandry is the use of the knowledge of the stock to maintain the proper age-sex distributions within the herd. Husbandry of the herd is not a shared responsibility although herding may be. The two are separate but complementary management skills. The social relationships involved in herding are different from those involved with husbandry. Herding decisions are short-term tactics, whereas husbandry decisions are long-term, affecting future generations. The status of individuals is based on different criteria if their herding abilities are being compared to their husbandry skills. All heads of families are equals with respect to their husbandry skills regardless of herd size since the herd size is a function of the family development cycle (the re-distribution of the herd to children) and all herders are subject to the animal ecology and even wealthy herders may suffer great losses. Paine suggests that these two concepts may be usefully employed in studies of pastoral societies both comparatively and in the analysis of production.

Palmer, Lawrence John

1926 Percentage Marking of Reindeer.  
U.S. Department of Agriculture. Bureau of  
Biological Survey, Bi-905. Washington, D.C.

"By biologist in charge of reindeer grazing investigations, Reindeer experiment Station, Fairbanks, Alaska. Under the corral method of handling reindeer . . unmarked stock is distributed on the basis of percentage ownership of females. Technical instructions are given as to the basis of fawn distribution, ownership of strays, inaugurating a marking system, tally sheets, round-ups, correcting fluctuations in numbers, checking, etc."

36650 in Arctic Bibliography 6:623. 1956.

1926 Progress of Reindeer Investigations in Alaska.  
U.S. Department of Agriculture, Department  
Bulletin No. 1423. U.S. Government Printing  
Office, Washington, D.C.

"Discussion of the growth of the industry, the herd owners, breeds and types of reindeer, feeding experiments, grazing practices, various types of ranges, influence of climate on grazing, soil conditions, forage plants, and range management."

13071 in Arctic Bibliography 2:1946. 1953.

1929 Improved Reindeer Handling.  
U.S. Department of Agriculture, Circular  
Number 82. November. U.S. Government  
Printing Office: Washington, D.C.

"Summary of method in Alaska "generally changed to conform to modern practices of handling livestock". Outline of herding, rounding-up, corralling, removing diseased stock, percentage marking, branding registry, castration, feeding, breeding, butchering, marketing pests, sled deer and the range."

13070 in Arctic Bibliography 2:1946. 1953.

- 1934 Raising Reindeer in Alaska.  
U.S. Department of Agriculture  
Miscellaneous Publication Number 207.  
Washington, D.C.: U.S. Government  
Printing Office.

Supersedes Circular Number 82, Improved Reindeer Handling. This short booklet contains a brief sketch of the development of the reindeer industry, its future growth and experimental work being undertaken. The physical characteristics of reindeer are described as is the character of the reindeer range in Alaska. Range management practices, range requirements and reindeer herd management practices are outlined.

- 1944 Food Requirements of Some Alaskan Game  
Mammals.  
Journal of Mammology 25(1):49-54.

"Contains a description of feeding experiments on caribou, musk ox, moose, Dall sheep, Sitka deer and buffalo. Caribou use a smaller percentage of the forage than do musk ox, 57% compared to 84% when using feed, and only 37% and 52% respectively when feeding lichens alone. Lichens are essential for reindeer and caribou in winter forage. The population density of animals within their habitats is given, but the field densities can be expected to be lower when factors such as deep snow, icing, winds, predators, and restricted winter ranges are considered. For caribou, 5 to 10 animals per square mile under ideal conditions can be expected. The principal forage plants for the above-mentioned animals is given based on range, feeding and pasturage tests as well as stomach examinations."

13069 in Arctic Bibliography 2:1945. 1953.

- 1945 Care and Operation of Reindeer Cold Storage  
Plants in Alaska.  
Washington, D.C. 28, number 1, mimeo'd.  
U.S. Department of the Interior, Office of  
Indian Affairs, Contributed by: Reindeer Range  
Management Research, L. K. Palmer, range  
examiner.

"Contains rules for temperature in cold storage rooms for handling cold storage, and emptying rooms; principles of cooling by liquid ammonia; mechanical parts in refrigerating plants and their operation; the ammonia system; repairing leaks and mechanical parts, tools and equipment."

36649 in Arctic Bibliography 6:622. 1956.



Palmer, Lawrence John and Charles H. Rouse

- 1945 Study of the Alaskan Tundra with Reference to its Reactions to Reindeer and Other Grazing. U.S. Fish & Wildlife Service, Research Report No. 10. U. S. Government Printing Office, Washington, D.C.

"Based on an investigation during 1920-1935 and subsequent to 1944, in the Norton Sound, lower Yukon and Nunivak Island ranges. Lists of grasses, herbaceous plants, shrubs, mosses and lichens, description of types of tundra vegetation (in detail) and notes on reindeer management on Nunivak Island."

13073 in Arctic Bibliography 2:1946. 1953.

Parker, Walter, Dale Swanson, Victor Fischer and Jennifer Christian

- 1972 Survey Report - Northwest Alaska Economic and Transportation Prospects. ISEGR Report for U.S. Army Corps of Engineers, Alaska District.

Report makes the points that 1) from a biological point of view, raising large numbers of reindeer is relatively easy; 2) ownership and management system has not enabled reindeer herding to become a dependable growing source of Native income; and 3) a market outside of rural Alaska has not been developed. Development of the industry has been blocked since statehood by confusion over subsistence versus commercial production goals, ownership and management personnel and techniques, and production techniques and marketing arrangements. Possible conflicts with caribou herds are noted if the industry should expand. The methods and economics of the slaughter and marketing of 600 animals from a herd of 2,000 are examined. Animals brought to the Nome slaughterhouse would be sold at a proposed price of 12 1/2 cents a pound.

Patterson, Art

1972        The Native Subsistence Values and their Relationships  
             to d(1) - d(2) Land Classifications.  
             Alaska Planning Commission, Anchorage.

This report and attached exhibits documents the need for accurate statistical and qualitative information on the numbers, kinds, uses and distribution of subsistence resources utilized by Native Alaskans. In addition to providing food for Natives, subsistence resources constitute a continuation of traditional lifestyles; with prestige accorded to the successful head of a family who provides well for his kin through hunting and employment (usually seasonal) and through the use of other economic opportunities available to him. Some subsistence activities are associated with much preparation and ceremony (the spring whale hunt at Point Hope, for example) or are immensely pleasurable communal activities with important economic (food-providing) values (the berrying activities of women and children, for example). The animals obtained from the land, sea and air may be traded, sold, used for raw materials for clothing or manufacturing, or disposed of in other ways. Subsistence for Natives is shown to be a complex question of historical continuity from ancient aboriginal patterns to the present day, associated with questions of land use priorities and the legal ramifications of ANCSA and various other pieces of legislation and regulations. Reindeer herding is viewed not as a subsidiary activity to augment subsistence needs, but rather as a resource on which a Native industry may be built.

1974        Subsistence Harvest in Five Native Regions -  
February    Arctic Slope, NANA, Bering Straits, Doyon, Ahtna.  
             Anchorage: Resource Planning Team, Joint Federal  
             State Land Use Planning Commission.

The subsistence harvest inventory was prepared from literature data, as well as from field counts, and surveys made in villages throughout the regions. Arctic Slope, Doyon and Ahtna areas reported no reindeer harvested. For the NANA and Bering Straight Regions, reindeer taken were 608 (76,000 pounds) and 256 (32,000 pounds) respectively. Reindeer subsistence poundages were obtained from three sub-categories, home use, herd operations, and barter/trade. No mention of the use or importance of reindeer as an alternative purchasable commodity for wage-earners is mentioned.

Pegau, Robert E.

1968a Reindeer Range Appraisal in Alaska.  
M.S. thesis, University of Alaska,  
College, Alaska.

"Several methods of evaluating reindeer ranges were tested on Nunivak Island and Seward Peninsula, Alaska. Aerial photographs or an aerial-visual method similar to those used in Sweden can be used to ascertain the boundaries and per cent composition of the various vegetation types on reindeer ranges. Weight estimates or double sampling weight methods can be used to determine the forage production of each vegetative type. The line point and 3/4 inch loop are not reliable for evaluating trend on tundra vegetation because the displacement of the line 1/4 inch or more causes a different species to be recorded at the same sampling point. Exclosures and permanent sample plots in which estimates of weight are recorded supplemented by photographs are recommended for range conditions and trend studies. The average annual linear growth of Cladonia alpestris, C. rangiferina and C. sylvatica on the Seward Peninsula was found to be 5.0, 5.3, and 5.4 mm respectively. Although there is no apparent selection of particular species of lichens during the winter by reindeer, in the spring and summer the lighter-colored fruticose Cladonia and Cetraria types are preferred. On summer ranges, where lichens comprise 30% of the available forage, at least 15% of the lichens should be considered unavailable because of trampling. By grazing only the top 1/3 of the lichen podetia in the dwarf shrub-lichen stands near Nome, it is calculated that 1,020 reindeer can be wintered per 100 acres during a 30 to 50 year period, compared to 192 if the lichens are completely grazed the first time." (Pg iii author's abstract).

1968b Growth Rates on Important Reindeer Forage  
Lichens on the Seward Peninsula, Alaska.  
Arctic 21(4):255-259.

The growth rates of three important reindeer forage lichens at three sites on the Seward Peninsula were measured. Average annual linear rate of growth of Cladonia alpestris was found to be 5.0 mm, C. rangiferina 5.3 mm, and C. sylvatica 5.4 mm. The measurements were taken when the lichens were moist, as dry ones tend to be brittle. The averages are higher than those for northern Canada and some areas that were studied over 25 years earlier in the U.S.S.R. Previous data from Alaska were apparently lacking, aside from a casual statement of a rate of 1/8 to 1/4 inch per year. The podetium renewal period for C. rangiferina is 5.9 years, C. alpestris and C. sylvatica take 11.1 and 10.7 years respectively.



1970a Succession in Two Field Enclosures Near  
Unalakleet, Alaska.  
The Canadian Field-Naturalist 84(2):175-177.  
April-June.

Two enclosures established by L. J. Palmer and others in the 1920's and 1930's were re-checked in 1965. Within the enclosures 1 m<sup>2</sup> quadrats were laid out and treated to simulate the effects of grazing and trampling. The results of the work to 1945 were reported by Palmer and Rouse. Pegau found that recovery in the plots was due mainly to plants expanding in from the periphery of the plots, rather than from the establishment of new plants within the treated areas. Recovery from overuse is very slow in the Dryas fjell-field type of range. Some of the lichens within this type are very important reindeer forage in winter, where this type is often exposed by blowing snow cover off it on exposed mountain tops. Full recovery of the plots had not been achieved even after a period of up to 36 years with no grazing.

1970b Effects of Reindeer Trampling on Lichens.  
Journal of Wildlife Management 23(2):95-97.

The model herd of the U.S. Bureau of Indian Affairs near Nome was used in a controlled experiment over a non-utilized portion of Eriophorum-Carex-dwarf shrub meadow under both moist and dry herding conditions. One summer's grazing in the area by the herd dislodged 68% of the lichens while another 16% were shattered into segments less than 1/2 inch in size. On summer ranges where lichens comprise at least 30% of the available forage, at least 15% of the lichens should be considered as unavailable because of trampling by reindeer.

Pelto, Pertti J.

1973      The Snowmobile Revolution: Technology and Social  
Change in the Arctic.  
Menlo Park: Cummings.

Skolt Lapp reindeer herders in northeastern Finland were studied to determine the impacts of the snowmobile on their way of life. The author argues that "...technological changes that shift production processes from local, autonomous sources of energy to a dependence on outside sources will almost certainly have wide-ranging consequences on the social and cultural patterns of the affected people: the replacement of reindeer sleds by snowmobiles in Lapland is not just another technical replacement." To demonstrate this he describes pre-snowmobile Lapp culture and herding practices and compares them with the contemporary situation. The spread of snowmobiles in Lapland and their maintenance and economic costs are presented. Finally, the social, political and economic effects of all this are shown to be an increased "... stratification of material wealth and economic resources in the community." Appendices give information on research methods, comparisons with other parts of Scandinavia and North America, and statistical information on the growing social classes of Finnish Lapps.

Presnall, Clifford C.

1953      Reindeer, an Indian Service Contribution to  
the War.  
North American Wildlife Conference, 8th.  
Denver, Colorado. Transactions:110-117.

"Deals with the reasons for the surplus in reindeer on Nunivak Island (60° 60' N 166° 24' W) and the plan to utilize it to aid the war. Information includes the range quality, fate and increase of reindeer transplanted from the Alaskan mainland by the Lomen Reindeer Company in 1920 and 1928, and sold to the U.S. Government in 1940. Plans for reducing the herds, utilization of meat and hides etc. are outlined. Musk oxen imported to Nunivak in 1935-36 are also noted to have prospered."

36921 in Arctic Bibliography 6:670. 1956.

Rainey, Froelich Gladstone

1941 Native Economy and Survival in Arctic Alaska.  
Applied Anthropology 1(2):9-14.

"A review of reindeer breeding among the Eskimos of Alaska, with an appraisal of the ethnologic reasons for the decline of the industry, including the effects, not only of open herding experiments, but also of the incorporation policy and the failure to adopt nomadic reindeer raising. The article includes suggestions for developing a balanced and healthy reindeer economy. Includes a map of physiographic regions of Alaska."

#14120 in Arctic Bibliography 2:2096. 1953.

Rausch, Robert A.

1963 Preliminary Report on Some Aspects of the  
Reindeer Industry in Alaska.  
Juneau, Alaska: Alaska State Department of  
Fish & Game, Division of Game.

This report examines the reindeer industry from the viewpoint of a game manager. The history and current status of the reindeer industry are summarized. Some problems which the reindeer industry faces, and would be harder pressed to resolve if it expanded are presented. Among these are herding as a year round occupation, range management and animal husbandry, marketing and slaughter, population control, legal problems and the competition with indigenous species and associated industries such as guiding and tourism. Conflicts associated with caribou, carnivores and waterfowl are discussed. The growing human population and reindeer populations are examined with economic data on herd sizes, values and sales and home use taken from the BIA Annual Land Operations Report 1962. Some considerations for the benefit of the reindeer industry and for the protection of the public domain are noted.



Ray, Dorothy Jean

- 1965 Sheldon Jackson and the Reindeer Industry  
of Alaska.  
Journal of Presbyterian History 43(2):71-99.  
June.

"Jackson's establishment of this industry in the 1890's is considered from the viewpoint of his motives and the Eskimos' culture. His appeals for Congressional and public support, his securing of Siberian reindeer and Lapp herders, also activities of the Teller Reindeer Station are reviewed as are opposition to the scheme and numerous difficulties it encountered. Jackson's purpose (adopted from Captain Healy of the Bear) was to provide the Eskimos with a stable food supply and raise their level of civilization by teaching them reindeer husbandry and herding. Author's studies indicate that the Eskimos weren't starving however, and as they were by tradition hunters and fishers, they proved reluctant herders generally. Later, Jackson envisioned reindeer herding as a means of aiding the industrial development of Alaska and he encouraged ownership of the reindeer by Lapps and other non-Eskimos."

#91107 in Arctic Bibliography 14:1044. 1969.

- 1975 The Eskimos of Bering Strait, 1650-1898.  
Seattle and London: University of Washington Press.

This is the only comprehensive ethnohistory written about the Eskimos in the Bering Strait region. Mrs. Ray devotes an entire chapter to the introduction, spread and distribution of reindeer among Eskimo, missions and Lapps on Seward Peninsula up to 1898. The mistaken judgments about the suffering of the Natives, and their decreasing numbers due to traditional foods being depleted by American whalers is described. The history of the transport of herds to Teller Reindeer Station, the cultural barriers to herding, and Jackson's ambitious plans for a faltering industry are told in detail. The chapter ends with the story of the drive of reindeer to Point Barrow for the relief of American Whalers there in 1899. Early problems with the reindeer enterprise were the wrong assumptions on which it was based (that the Eskimos were wandering nomads, always half-starved and in search of food) and the too small size of the herds for a successful enterprise (cf. Leeds 1965 discussion of herd maxima, minima and optima for Chukchi herders).

Redmyer, Hedley E.  
translated and edited by Sverre Arestad

1951 Reindeer in Alaska.  
Pacific Northwest Quarterly 42(3):211-223. July.

"A condensed translation from Skandinaven, July 31, 1899 (Norwegian-American newspaper formerly published in Chicago). Redmyer, with a crew of six (including five Lapps from Norway) drove the introduced reindeer from Haines in Southeast Alaska north through Yukon Territory to Circle (65° 50' N. 144° 04' W). The animals were part of a herd of more than 500 purchased by the U.S. War Department in Norway and shipped to Seattle, thence in March 1898 to Haines, where by April 15, 362 had died from hunger. Redmyer started his drive with 185 deer, May 6 1898 and arrived in Circle February 28, 1899 with 114. Difficulties and dangers of the trip are described."

47542 in Arctic Bibliography 8:768. 1959.

Ricks, Melvin Bryon

n.d. A Basic Bibliography of Alaskan Literature.  
Juneau. 1960. (typewritten in four volumes)

This is one of the most comprehensive bibliographies of Alaskan source materials. Ricks has cross-indexed his entries with the entries in other major bibliographies. Coverage of topics is good, with many items coming from popular journals, as well as scientific reports and government documents. The bibliography is not annotated. Several pages are devoted to reindeer in Alaska.

Roberts, Brian Birley

1942 The Reindeer Industry in Alaska.  
The Polar Record 3(24):568-572. July.

"In 1941, there were approximately 205,000 reindeer in Alaska, of which natives own an estimated 161,000 and the Government 44,000. These animals graze 56 ranges on the west coast between Kodiak Island and the Arctic coast east of Barrow, an area of 166,000 square miles, or about the size of California. A total of 3190 Eskimos, Aleuts and Indians own stock in one or more of the 36 native reindeer associations. Including families of native owners over 14,000 persons depend upon reindeer as an essential source of food and clothing. During 1941, 23,966 reindeer were butchered for food, skins, dog feed, and for sale; of this number 6384 were sold for a cash return of \$49,753. Forty-two round-ups were conducted, at which 154,919 reindeer were handled at corrals." (pps 571-572.)

14670 in Arctic Bibliography 2:2174. 1953.

Robertson, Charlie Anthony

1970        The Marketing of Reindeer Products in Alaska.  
              M.B.A. Thesis. Fairbanks: University of Alaska.

The thesis covers the problems of marketing reindeer products, future prospects of the industry, production aspects of reindeer products, marketing of reindeer products and recommendations. The recommendations advocate state control of the administration and development of the reindeer industry, preferential hiring of Natives when they have the required skills for the industry and the retention of Native ownership of the reindeer, and a re-emphasis on the need for research into parasites and diseases with the University of Alaska heading up the research program. The need for proper herd and range management is emphasized.

Rogers, George W. & Richard A. Cooley

1962        Alaska's Population and Economy. Regional  
              Growth, Development and Future Outlook.  
              Volume I - Analysis. Volume II - Statistical  
              Handbook. Office of the Governor: Juneau.

This study aims at obtaining background information for the use of the Division of State Planning in preparing annual and six-year capital improvement programs. The two volumes allow historical comparisons to be made between Alaska and other regions of the United States in areas such as population, income, employment, natural resource extraction, manufacturing and other economic indicators. Reindeer herding is mentioned only briefly, under Agricultural Products. The value of reindeer meat sold is given as 137,600 dollars in 1958, \$134,000 in 1959, and \$132,000 in 1960. Data for 1949-1957 is not available. No analysis of the social value of herding is made, nor are any data presented other than that an estimated 250 people are involved in herding. No future projections for the industry are made, nor are its past history and production assessed. Data are all from Alaska Farm Facts, Alaska - Farm Production, and Alaska - 1960 Farm Production.

Rood, J. Sidney

1938        This Reindeer Business.  
              Alaska Life 1(8):17. September.

"Brief and informative summary of information on the raising and use of reindeer by the Alaskan natives."

14807 in Arctic Bibliography 2:2193. 1953.



Rouse, Charles H., Charles R. Mountjoy & Dale  
M. Belcher.

1948 Reindeer Survey - 1948.  
U.S. Fish & Wildlife Service and Alaska  
Native Service. Unpublished report. 19 pps.

In this much cited report, the results of a survey of the herds and range in summer of 1948 is reported on, and conclusions and recommendations regarding the reindeer industry are made. The investigators report the origin of the current reindeer in the herds, the range condition prospects for increase, and number of people involved in the operation for the following herds (some data is missing or incomplete for some categories): Nunivak Island, Hooper Bay, St. Michael - Stebbins, Egavik, Golobin, Mickey Thomas herd, Henry Weber and York Wilson herd, Selawik, Shungnak, Point Hope Reindeer Company, Kivalina - Noatak, Wainwright Reindeer Association herd, Albert Hopson herd, Tommy Brower herd, Cape Halkett, Escholtz, Fred Topkok herd (Topkok Reindeer Company). The following questions were asked of all people involved with the reindeer industry that the investigators contacted during the survey: 1) Do you think reindeer are needed by the Native people; 2) what do you think caused the decrease of reindeer; and 3) do you think reindeer can be built up again and by what means? Affirmative answers to all three questions were given by both Natives and non-Natives, although different emphasis was given to the causes of herd declines when responding to question 2. The report concludes that reindeer are definitely needed by Natives in northwestern Alaska and that individual ownership and management offers the greatest chance of success. Predator control with U.S. Fish & Wildlife Service's cooperation is recommended. With government aid in establishing herds and teaching modern management techniques the chances for successfully reviving the reindeer industry appears favorable.

Rowe, Howard Marshall

- 1938      A Preliminary Draft of a Subject Index to Historical Material of the Pacific Northwest and Alaska to be found in the United States Congressional Series and other United States Public Documents from 1881-1931. University of Idaho: M.A. Thesis.

This thesis is designed to continue and complement the index prepared by Katherine Berry Judson. The Judson index was produced as an M.A. thesis for the University of Washington in 1913, entitled "A Subject Index to the History of the Pacific Northwest and Alaska as found in the United States Documents, Congressional Series in the American State Papers and in Other Documents, 1789-1881". Rowe's thesis contains a subject index and annotations as the two major sections of the work. By confining the coverage to government documents only, one would expect excellent coverage of the sources but a number of reports, including some of Jackson's reindeer reports have been overlooked in this preliminary draft.

Ryan, W. Cameron Jr.

- 1933      The Alaska Reindeer Industry. Confidential Report by the Director of Education Office of Indian Affairs, U.S. Department of the Interior.

This report summarizes the history of reindeer herding to 1933, with particular emphasis on the acquisition of herds by non-natives, in particular, the Lomens. The report stresses that the role of the government should be to provide for the welfare of the native through economic and social development and the responsibility of managing his own affairs. The events of recent years, including the internal operations of the Reindeer Service are evaluated against this principle. Some controversial reindeer matters are examined, including the Lomens and their business and practices, the Nunivak Island reindeer operation, the Trowbridge-Gillman reports, and the case of Ben Mozee. A summary of conclusions and recommendations is given which includes as immediate steps to be taken: 1) a re-emphasis of the original purpose of the reindeer industry; 2) the need to provide appropriate leadership by rescinding the action of November, 1929 whereby the Governor of Alaska was entrusted with reindeer operations; 3) increased native participation in the Reindeer Council and; 4) assigning more sympathetic investigators to reindeer matters. Further investigation of the Lomens, the legal question and white ownership of reindeer, relations with the Agriculture Department, the Governor of Alaska, the inheritance of reindeer and the case of former Reindeer Supervisor, Benjamin B. Mozee is called for.

Saario, Doris J. & Brina Kessel

1966 Human Ecological Investigations at Kivalina.  
In: Environment of the Cape Thompson Region,  
Alaska, edited by Norman J. Wilimovsky and  
John N. Wolfe.  
United States Atomic Energy Commission, Division  
of Technical Information.

"The human ecology of Kivalina, a village of 24 occupied dwellings (150 people) situated along the shore of the Chukchi Sea, was studied over a 22-month period. The formal social structure of the village is minimal; the Village Council is the closest approximation to a governing body, and it deals with problems that affect the village as a whole. Village representatives of federal and state agencies deal with other activities within the village. The economy of the village is based primarily upon the natural resources that the people obtain in their annual hunting and fishing cycle. Major phases of the subsistence cycle are seasonal and include fishing, caribou hunting, seal hunting and ugruk hunting. Basically the best hunters of the village are accorded the same respect and prestige that has been theirs in the past; however, the need for people who can communicate and interact with the outside forces that are impinging more and more upon the village has created new possibilities for prestige and leadership. It is probable that most of the villagers retain the old Eskimo values and that the drive to acculturation is expressed more in the goals and attitudes of the people than in the modern conveniences they employ." (Pg 969). A reindeer herd owned by two Eskimos was brought into the Kivalina area in 1903. The Kivalina Reindeer Company was formed as the herds increased and people came to own their own reindeer. Reindeer were herded in the area up to 1946 when the last of the deer disappeared. The company store which had sold skins and meat to Seattle and brought staples into the village, joined the Alaska Native Industries Cooperative Association (ANICA) when the company dissolved. Caribou began to move back into the Kivalina area in the 1940's; mingling with caribou herds and lack of careful herding of the reindeer are some of the reasons given for the reindeer's disappearance.



Schmidt, W.

1951      Zu den Anfängen der Herdentierzucht.  
Z. Ethn., Bd. 76, pp. 1-41.

"An examination and discussion of data and evidences concerning early herd-animals and their origin. Domestication of animals is seen as a gradual result of a primitive hunting civilization ("Urkultur"), nomadism associated with herding being a necessary transitional state. Man came in earliest touch with herd-animals on the steppe lands of central Asia, where the cradles of ancient domestication are sought. "Reindeer supplied the material for the earliest domestication, practiced by Samojedic Sojots by Mesolithic (or even late paleolithic) times, followed by horses, the taming of which was started in the fifth millenium B.C. among Turk tribes in Iran. Domestic sheep and goats are secondary to horse or camel, the latter itself originally a mere follower of horse-breeding. Cattle-breeding arose also as a secondary element, but its geographical origin remains obscure."

Angress & Reed 1962:92.

Scotter, George W.

1965 Reindeer Ranching in Fennoscandia.  
Journal of Range Management 18(6):301-305.

Conclusions (Pg 305).

"Reindeer in Fennoscandia utilize a land resource which would otherwise be of little value. For this and other reasons the industry should be encouraged and promoted. Although there is still room for improvement the reindeer industry has become more efficient in recent years. Efficiency could possibly be improved in the following ways: 1) It is generally agreed that winter range is the factor which will curtail the expansion of the reindeer industry. More effective range use can be obtained by reducing the number of males in the herds, by slaughtering the younger animals, by selecting animals which are more efficient in forage utilization, and by artificial feeding. 2) The quality of reindeer has deteriorated because of poor breeding practices. Improved breeding practices such as culling of the inferior animals and changing of the gene pool by introducing males from other herds should increase both size and quality. 3) Research and management results are not widely used by the owners. An education program is required. 4) Development of a luxury market for reindeer meat should be encouraged. 5) The number of reindeer owners should be reduced and restricted to those who derive a large part or all of their income from the animals. The outlook of the industry would appear to be bright."

1972a Reindeer Ranching in Canada.  
Journal of Range Management 25(3):167-174. May.

"Of five attempts to develop reindeer ranching in Canada, the Mackenzie Delta herd is the only one still in operation. The herd was established to supplement the region's wildlife resources and to improve the Eskimos economic condition by creating a number of viable native-owned herds. All of the native-owned herds, established from the nucleus herd, eventually reverted to Government ownership. The reindeer operation has not proven to be economically viable. Game ranching with native animals in northern Canada may offer the best potential for conversion of vegetation into meat." (Author's abstract pg 167).

1972b Reindeer Journey on the Rim of the Arctic.  
Alaska Journal 2(2):57-60. Spring.

The story of the drive of 3,000 reindeer from the Seward Peninsula area to Canada by the Lomen Brothers is given in this article. The Canadian Government contracted with the Lomens to deliver 3,000 head of reindeer from Alaska to the Mackenzie Delta where the Canadian herd was to be located. Bad weather, straying deer and predators delayed the drive for several years. The Lapp Andrew Bahr was in charge of the drive, despite his advanced age at the time he took command of the operation.

Shaw, Elmer W.

1965 Reindeer in Alaska.  
Our Public Lands 15(2):16-17. Fall

This very brief article gives a capsule summary of the history of reindeer in Alaska, problems of the industry and a description of the Nunivak Island Processing plant.

Sirelius, U. T.

1916-20 Über die Art und Zeit der Zähmung der  
Reintiere.  
Trav. ethnogr. Soc. finno-ougr. ., Tom. 33  
pp. 1-5. Helsinki.

"The author finds the very beginnings of reindeer domestication in the use of tame reindeer as decoys while hunting wild reindeer; the use of the animals as a beast of burden came next and the keeping of larger herds came later. Based upon a find of a drag-sledge in the moors of Saasigäroi (Finland) from the Finnish Stone Age, it is assumed that the reindeer was already in use as a draft animal at that time."

Angras & Reed 1962:96.



Skuncke, Folke

1969 Reindeer Ecology and Management in Sweden.  
Biological Papers of the University of Alaska  
Number 8. Fairbanks.

"A uniform scale for the qualitative evaluation of reindeer pastures in different seasons has been designed. The scale has been used in Sweden and has been approved as a classification norm by Norwegian and Finnish experts. Systematic snow studies have been pursued. The new problems for reindeer husbandry which have been caused by the rapid, large-scale modernization of forestry in the last decades, have been thoroughly examined with the intention of trying to achieve a synthesis of interests and a greater understanding between the two sides. A very large quantity of statistical material on reindeer body measurements and weights together with a total of 849 skulls from reindeer of determined age have been collected. It is intended that the Reindeer Research Institute has set up a reindeer station in northern Sweden. For 11 years it has been possible to follow feed, medically examine and collect research data from a homogenous reindeer population. For the assessment of pasture capacities an aerial surveying method has been developed which provides satisfactory results extremely rapidly and cheaply. Several thousand figures collected from weighing and measuring known-age animals together with results from reindeer counts in the same site as made by the Lapp Administration for the 40-year period from 1921 to 1961 have made it possible to design a number of management plans for use in practical reindeer husbandry. These data were required and thus utilized for working out the monetary value of the pasture ranges." (Pps 76-78 author's summary).

Smith, Philip S.

1913 The Noatak-Kobuk Region, Alaska.  
U.S. Geological Survey, Bulletin 536.  
Washington, D.C.: U.S. Government Printing  
Office.

Brief mention is made of the reindeer moss which is abundant in the better drained lowland areas particularly along the tributaries of the Noatak near the Cutler and Anjuk Rivers, and of the Government reindeer herd which grazes between the mouth of the Noatak River and Cape Krusenstern.

Snodgrass, Marjorie P.

- 1968        Economic Development of American Indians and Eskimos, 1930 through 1967: A Bibliography. Washington, D.C.: U.S. Department of the Interior, Office of the Secretary. Departmental Library, Library Series No. 10.

This bibliography covers all categories of economic development, both on and off reservations. The range covered includes arts and crafts on the one end and major irrigation and industrial development on the other. Government agencies supplied many of the bibliographic sources. Thus unpublished and uncataloged material forms a substantial portion of the bibliography. Most major published works are included, as are journal articles and reports.

Snodgrass, Roland

- 1974        Agriculture and Range Resources, Resources Inventory, Northwest Region. Anchorage: Resource Planning Team, Joint Federal-State Land Use Planning Commission for Alaska.

The Resource Planning Team warns that its data is derived primarily from the literature data base, and has been interpreted by at least one member of the team. Keeping in mind that other interpretations are possible, no commercial production of cultivated crops is probable under natural conditions in the Kotzebue Sound, Seward Peninsula and northern Norton Bay area (Northwest Region). All of the area in the region below 4,000 feet is suitable reindeer/caribou range; the wooded areas of the southern Brooks Range serve as wintering ground for the majority of the western Arctic caribou herd. The range forage resources for reindeer/caribou and musk-ox are examined in some detail following the short description of the region's climatic features, topography, hydrological factors, vegetation and soils. A list of forage species utilized, growth rates, summer and winter pasture requirements, reindeer feeding habits and Soviet range study data are presented. The current reindeer situation and the physical limitations (foremost is an adequate winter feed base) receive a brief discussion.

1974      Agriculture and Range Resources,  
Resources Inventory, Arctic Region.  
Anchorage: Resource Planning Team, Joint  
Federal-State Land Use Planning Commission for Alaska.

As with other reports of the Resource Planning Team, alternative interpretations of its data are possible. Because of climatic limitations in the Arctic Region, commercial cultivation is not possible. Two major caribou herds utilize the range. The western arctic herd has its summer and fawning ground lying generally west of the Colville River to the Beaufort Sea. The Porcupine herd has its summer range and fawning grounds on the coastal plains south of Barter Island. Reindeer have been lost to the western arctic herd, a process which was accelerated during the decline of the reindeer industry (ca. 1933 to 1950) and which continues to some extent today. Major changes in technology and organization will be necessary to develop and to utilize the forage resources of the region to the fullest possible extent, according to the author.



Sonnenfield, Joseph

1957        Changes in Subsistence Among the Barrow Eskimo.  
Ph.D. dissertation. Baltimore: the Johns Hopkins  
University.

Based on a five month period of residence at Barrow and on literary sources, this dissertation describes the aboriginal lifeways of the Barrow Eskimo and the changes in social, material and economic spheres since the coming of Euro-Americans to the Barrow area. Beginning with the whaling industry prior to the turn of the century, the Barrow area has been affected by the missionary activities of the Presbyterians, government administrators, traders, trappers and the reindeer industry and petroleum exploration activities. The author gives excellent historical and analytical summaries of all of these and their impacts on Barrow Eskimos and their way of life. The Barrow reindeer herds originated from the herd driven to Barrow in 1898 to relieve the whalers stranded there in the ice. From 125 in 1898, they increased to over 30,000 in 1935 and diminished to less than 1,000 in the Barrow area by 1951. Apart from reindeer scattered in caribou herds, no reindeer were being herded on the Arctic Slope after 1952. The changes in policy of the government and the reindeer stock companies is examined and the decisions found to be rational under the circumstances in which they were made. The growth and decline of the herds is examined in the context of other economic and/or subsistence alternatives available to the herders as well as the changing conditions of the herds' range, predation pressure and rate of utilization. The effects of the reindeer industry on Barrow Eskimo subsistence are found to be negligible, although the herds did act as a source of food during the 1930's when fox fur prices fell and wage opportunities were few. Milking of reindeer was never common, use of the skins was sporadic, and the use of reindeer teams for transportation never fully replaced the hardier dog teams. Caribou/reindeer interactions and effects are discussed. Graphs are given showing the history of the Barrow reindeer herds, the number of apprentices and owners of reindeer, and the distribution of native ownership of herds at Barrow and other Arctic Slope herds.

1959        An Arctic Reindeer Industry: Growth and Decline.  
Geographical Review 49(1):76-94. January.

Based on an analysis of the history of the Point Barrow reindeer herds, the author traces the failure of herding in that area to cultural and economic factors. The Eskimo is by tradition and training a hunter, not a herder. Year-round inland herding often conflicts with the scheduling demands of hunting. For example, the fawning season for reindeer comes at the time when preparations must be made for spring whaling. The local demand for reindeer meat is highest when wage-income is highest. Paradoxically, the herder can usually earn more by directly participating in wage-labor than indirectly by the sale of more reindeer meat to the increased market.

- 1960 Changes in Eskimo Hunting Technology: an Introduction in Implement Geography. Annals of the Association of American Geographers 50(2):172-186.

The changes in hunting technology of the Eskimos of the Point Barrow area since contact with Europeans are examined. A distinction is made between the efficiency of a weapon (the capability of the implement to perform certain mechanical functions) and its effectiveness (the applicability of the efficiency criteria to a specific context of use where culture and the environment are the variables). Traditional methods of various hunting techniques are presented. These techniques are compared with the use of the rifle for sea-mammal ice-hunting, the whaling gun, and the rifle for caribou hunting. The author concludes that efficiency alone would not dictate solely whether or not a new implement would be accepted by the Eskimos. Rather, a balance between its efficiency and its effectiveness in the new ecological and cultural context determined its acceptance or rejection.

Spiess, Arthur

- 1975 A Bibliography of Rangifer (reindeer or caribou) for Anthropologists, Archaeologists and/or Palaeontologists. Boston: Harvard University, Department of Anthropology. (Unpublished)

A total of 623 sources are included in this bibliography which is indexed according to topics and sub-indexed by language of the publication. No attempt was made to cover all the ethnographic literature on caribou-using peoples. The bibliography's main area of coverage is Canada, but the Alaskan and Eurasian sources are also included. The bibliography is not annotated.



Stager, J. K. & K. G. Denike

1972 Reindeer Herding in the Mackenzie Delta  
Region: A Social and Economic Study of a  
Northern Resource Industry.  
University of British Columbia: Department  
of Geography.

This study is an insightful analysis of the problems which the Canadian reindeer industry in the Mackenzie Delta faces. Included in the study are: an historical summary of the herd, its origins, size, ownership over time, the Eskimo herders and local attitudes towards the industry, the economics of the industry, and alternative strategies for the disposal of the herd should the Canadian Government decide to do so. The authors recommend that the herd be sold and subsequently managed by a single owner, preferably someone of Native origin in the Northwest Territories, and give several other recommendations for the continued operation of the herd. During their study, the authors find parallel problems in the Canadian reindeer industry which the Alaskan industry faces. Market shortages, labor problems, high transportation costs, predation, insect damage and conflicting land use are common to both Alaska and the Mackenzie Delta region.

Stanford Research Institute

1969a Planning Guidelines for the State of Alaska.  
Prepared for the Office of the Governor, State  
of Alaska.

"If reindeer are to become economically important again in Alaska, the question of ownership of the animals and pasture rights will have to be resolved. The economic potential of reindeer is great enough that their production warrants additional study. Research on range management is most important in this regard." (Pg. 15).

1969b Planning Guidelines for the State of Alaska.  
Supporting Analyses. Volume I.  
Prepared for the Office of the Governor, State  
of Alaska.

A brief summary of the history of the reindeer industry is given, along with identifying the management problems of the industry: question of herd ownership, control of grazing lands, optimal herd size, stocking rates, herd composition, slaughter rates, and marketing. The study concludes that the enormous potential of reindeer herding calls for further study, and that it has a much greater potential than has been realized in recent years.



Stephens, Christopher A.

1973 Alaska's Red Meat Market - A Market Analysis.  
M.B.A. thesis. University of Alaska: Fairbanks.

This thesis describes Alaska's contemporary red meat (beef, veal, pork, cured pork, lamb, and lunch meats) market and its characteristics. The transportation modes and costs for red meat in Alaska are examined, and future developments are suggested. An analysis of the market finds the military, wholesale and retail markets to be the largest for red meats. The market potential for Alaskan-produced beef and hogs, their costs and problems are examined. Among the findings and recommendations made were that Alaskans consume a low per capita amount of red meats when compared with the national average; it is suggested that this is due to the large quantities of wild game and reindeer consumed. Alaskan consumers might find Alaskan-produced beef graded at good very acceptable because they are already used to lean wild game and reindeer products.

Stern, Richard O.

1975 A Selected Annotated Bibliography of Social  
Science Literature Relating to Reindeer Herding  
in Alaska.  
Unpublished ms. on file with the Arctic Institute  
of North America.

This bibliography contains sources which deal with the Alaskan experience of reindeer herding. Sources which deal solely with biological or physiological topics are not included, nor are sources in languages other than English.

Sundborg, George

1942 Bibliography and Abstracts on the Subject of  
Agriculture in Alaska, 1867-1942.  
National Resources Planning Board, Region 10.  
Juneau, Alaska.

Literature on agriculture in Alaska is abstracted and presented. Material that was found dealing with reindeer during the bibliographic search is presented, but not abstracted. Eighty-eight items, mostly from popular literature are given in the bibliography.

Tourville, Elsie A.

- 1974 Alaska, A Bibliography 1570-1970 with Subject Index.  
Boston: G. K. Hall & Co.

The 5040 sources in this bibliography come from a variety of sources which include books, pamphlets and popular journals. State (territorial) and Federal publications have been omitted except in cases where they were reprinted and widely distributed. The bibliography is not annotated, and is mostly concerned with non-scientific writings.

Turner, Herman

- 1959 Science and Agribusiness in Developing the Reindeer Industry.  
Paper Presented at the Tenth Alaska Science Conference, August, 1959: Juneau, Alaska.

"Reindeer were brought into Alaska from Siberia at the turn of the century to offset a decline in caribou due partly to the introduction of firearms among the Eskimos. Later, white men supported by outside capital nearly took over the reindeer industry. Overgrazing and mismanagement soon reduced the thriving herds to near extinction. The government then took over the reindeer by purchasing all the deer belonging to the whites. The Bureau of Indian Affairs was given the responsibility of getting the reindeer back into the hands of the Eskimo. This is being accomplished; new herds are being started under Eskimo ownership. As many villages as possible should have reindeer in their vicinity. Food, clothing and bedding can thus be provided for local consumption. Outside capital should be encouraged to establish slaughtering and processing plants where Eskimos who own reindeer herds can sell reindeer which can then be shipped to city markets. This will give the herd owners a cash income. Scientific research is needed on range management and control of warbles. Roads need to be built to give herd owners access by truck to slaughter houses." (Pg 15 of Proceedings).

U.S. Congress House of Representatives.  
Committee on Ways and Means.

1921        Hearings on Reindeer Meat, January, 21, 1921.  
              Statement and Brief of Carl J. Lomen.  
              Washington, D.C.: U.S. Government Printing Office

"A brief in support of listing reindeer meat as a distinct section in the tariff bill; with excerpts from magazine articles, letters and documents concerning reindeer and the reindeer industry in Alaska."

18325 in Arctic Bibliography 2:2717. 1953.

U.S. Congress. House of Representatives.  
House Committee on Military Affairs.

1899        Relief of People in the Yukon River Country.  
              55th Cong. 3rd Sess. House Doc. No. 244.  
              Washington, D.C.: U.S. Government Printing Office.

"Contains. . . 3 (pps 21-54) correspondence concerning the emergency undertaking to bring 500 reindeer and 50 Lapps from Scandinavia to haul relief supplies to the Yukon Valley, including letters, January - November 1898, from Sheldon Jackson describing the getting of the reindeer in Norway, transportation by sea and train to Seattle, and travel in Alaska."

18320 in Arctic Bibliography 2:2716. 1953.

U.S. Government

1973        Cumulative Subject Index to Government Documents,  
              1900-1971. Washington, D.C.: U.S. Government  
              Printing Office.

Government publications and reports of research were located under the subject headings "reindeer" and "Alaska-Reindeer". The majority of these items are the Bureau of Education reports on the work of the Bureau for Alaskan Natives and the reindeer service, and Sheldon Jackson's reports on the introduction of domestic reindeer into Alaska. These are found in the annotated bibliography section.



United States Department of Commerce

1959 Alaska - Its Economy and Market Potential.  
U.S. Department of Commerce: U.S. Government  
Printing Office, Washington, D.C.

To provide information about the new state of Alaska data on the land and the people, market characteristics natural resources and their development, and future potential are brought together in this volume. The role of reindeer herding in the state's economy is not mentioned.

U.S. Department of the Interior

1931 Hearings of the Reindeer Committee in Washington  
D.C. February to March, 1931. (Mimeo)

This document contains the transcript of the nine hearings held in Washington D.C. to investigate the conditions and prospects of the reindeer industry in Alaska. The testimony of Carl Lomen and others is included. The findings of fact and recommendations by the Reindeer Committee composed of Kendrick, Leavitt and Sisson are presented in this volume.

U.S. Department of the Interior  
Alaska Planning Group

1974a Final Environmental Impact Statement - Proposed  
Cape Krusenstern National Monument.  
Washington, D.C.: U.S. Government Printing Office,

The proposed Cape Krusenstern National Monument includes approximately .4 million acres of lands along the Chukchi Sea which contain nationally significant archeological sites along 114 beach ridges, geologic forms and arctic lowland and coastal biological features. The National Park Service proposes to administrate the Monument to preserve, scientifically investigate and interpret the archeological, cultural and biological resources of the area. Virtually the entire proposal area is suitable for reindeer grazing and most portions of it, have, at one time, been utilized as reindeer pasturage. Caribou also frequent the region, some small bands winter in the Igichuk and Mulgrave Hills. The Bureau of Land Management discontinued herding in the area in 1966 because of a conflict with caribou herds. The reindeer formed part of the Model Herd at Nome, until their purchase by NANA Corporation for herding in the Kotzebue area in 1975. At present, no grazing leases exist in the area. Herds from Noatak, Kivalina and Kotzebue used portions of the proposed Monument for grazing in the past.

U.S. Department of the Interior  
Alaska Planning Group

1974b      Final Environmental Impact Statement - Proposed  
              Chukchi Imuruk National Reserve.  
              Washington, D.C.: U.S. Government Printing Office.

The proposed Chukchi Imuruk National Reserve includes approximately 2.7 million acres of lands on the northern portion of the Seward Peninsula, Alaska. Its purpose is to preserve an outstanding unaltered tundra environment and the associated values within it. The resource management program includes plans to allow reindeer grazing to continue as an acceptable use within the proposal area, in such a manner as research "may indicate that reindeer can to the extent possibly occupy the ecological niche once filled by the caribou." Seventeen reindeer allotments existed on the Seward Peninsula and adjacent areas in 1972. Some 5,000 people are estimated to receive income indirectly from the herd's operation, in addition to the income received directly by the herders. Although National Park Service would allow this major industry to continue to operate in currently leased areas, and the demand for meat continued to exceed supply, "it introduces an artificiality into the ecosystem," and "herd size would not be allowed to expand unless detailed investigations showed that additional animals would not degrade vegetation resources, destroy colonial nesting bird habitats, or otherwise adversely modify other reserve values." Increased tourism to the reserve and the regional centers (Nome and Kotzebue) could increase the demand for reindeer meat and handicraft items. Herd visitation is not mentioned as a tourism attraction.

U.S. Department of the Interior  
Alaska Planning Group

1974c      Final Environmental Impact Statement - Proposed  
             Selawik National Wildlife Refuge.  
             Washington, D.C.: U.S. Government Printing Office.

The proposed Selawik National Wildlife Refuge includes approximately 1.4 million acres of land in the lower Selawik River region of northwestern Alaska. As proposed the Refuge would have the existing Chamisso National Wildlife Refuge added to it, and be managed by the U.S. Fish & Wildlife Service in accordance with the policies of protection and preservation of nationally and internationally significant wildlife populations and their habitats, with special emphasis given the migratory birds, endangered species, and anadromous fishes. The reindeer industry is described under the history of the region and in the section of environmental impacts on the proposed action (grazing). Reindeer herding in the region has been unsuccessful historically for a number of reasons. Current, valid grazing permits would be honored if they are found not to conflict with Refuge values. Extension of grazing permits would probably be disallowed. While the Refuge would put a limiting factor on the expansion of the reindeer industry, the caribou which would be protected from conflicts with reindeer would provide a greater subsistence source to more people, thus benefiting the region at large. Reindeer grazing restrictions within the refuge may result in failure to fully utilize resources in the short-term, but will serve to sustain long-term benefits associated with renewable natural resources.



U.S. Department of the Interior  
Alaska Planning Group.

1974d      Final Environmental Impact Statement - Proposed  
             Noatak National Arctic Range.  
             Washington, D.C.: U.S. Government Printing Office.

The proposed Noatak National Arctic Range includes approximately 7.59 million acres of lands and waters in the Noatak and Squirrel River basins of northwestern Alaska. As proposed, the Range would be managed by the Bureau of Land Management and the U.S. Fish & Wildlife Service and be subject to a twenty year moratorium of land development to allow time for baseline research on this virtually virgin arctic environment, and to develop a conceptual master management plan for the area. Reindeer herding was an activity of some importance within the proposal area from 1909 when reindeer were introduced to Noatak village, until the 1940's when caribou which had been returning to the area since the 1920's made reindeer herding economically unattractive. Since the early 1960's snow machines have allowed even greater mobility in the pursuit of subsistence hunting. The problems faced by herders within the proposal area include: range deterioration due to inadequate herding, reindeer reverting to the wild state and joining caribou herds, brucellosis infection from contact with diseased caribou, and predation on reindeer by wolves. The reindeer industry flourished in the region at one time; a round-up in nearby Kivalina in 1928 had 36,000 reindeer counted. A range estimate of one reindeer per 200 to 900 acres to prevent range damage is used and, combined with past poor performance of communally owned herds, the Bureau of Indian Affairs recommended abandonment of reindeer ranges in the proposal area in 1970. Reindeer grazing would not be permitted; there are at present no grazing leases within the proposed area. Bureau of Land Management reports no significant adverse impacts on soil, water quality or air quality associated with grazing on the Seward Peninsula except for localized disturbances around corrals.

U.S. Department of the Interior  
Bureau of Land Management

1966            Minutes of the RAD-TAP meeting.  
                 Anchorage, Alaska: January 11.

The RAD-TAP has as one of its major functions the exchange of information between state and federal agencies to permit better coordination and make more widespread use of available information. At this meeting, the report of the Reindeer Sub-Committee was presented, based on a meeting held November 15, 1965. Those attending: Terry McGowan (ADF&G), John J. Teal, Jr. (U of A), James W. Mathews (U of A), Sal DeLeonardis (BLM), Dr. Fred Honsinger (Ak Div. Ag.) Ross L. Miller (BIA - Chairman) Prentiss Gazaway (BIA), Dave Scott (BIA) and Ed Nygard (BIA). Soliciter's opinion regarding Native ownership of reindeer is discussed. The need for a cooperative agreement among the agencies involved was considered and two people appointed to draft a resolution using BIA to carry out the intent of HJR #22 dated March 7, 1963. Concentration on Seward Penninsula as the area for development of the reindeer industry was agreed upon. U.S. Fish & Wildlife Service ought to be invited to participate in Committee. Model Herd plans for training research and demonstration presented by Mr. Scott. DeLeonardis' recommendation reads: "The Reindeer Sub-Committee of RAD-TAP recommends that the area director of BIA concentrate efforts to expand the reindeer industry to the Seward Penninsula Area. This area now holds the greatest concentration of privately operated reindeer herds and appears to offer the best opportunity of demonstrating the commercial possibilities of a reindeer operation with a minimum of conflict with other resources."

U.S. Department of the Interior  
Bureau of Land Management

1975      Environmental Analysis Record - NANA  
Reindeer Grazing Application in the Kotzebue-  
Noatak Area.  
Fairbanks: Fairbanks District Office.

This Environmental Analysis Record (EAR) was prepared in response to NANA Corporation's application to graze reindeer on BLM-administered lands on the Baldwin Peninsula and Noatak/Kivalina area. The goals of the Corporation are "to provide a dependable food source for local Natives, stimulate and develop possible local industry, and determine the feasibility of reindeer herding in the NANA region. In addition, scientific studies and experiments will be conducted." (page 4) Possible alternatives to the proposed action are: 1) issue no permit; 2) issue a permit on Native Selection lands, D-1 lands and Cape Krusenstern National Monument proposal; 3) issue a permit on presently licensed and identified reindeer range excluding D-2 lands, and; 4) issue a permit for the reindeer range presently licensed to Charley Clark. Conflicts with land-management plans are found to exist with all alternatives, with wildlife, and with the possibility of trespass. The BIA Model Herd at Nome was loaned to NANA Regional Corporation, Inc. to establish the NANA herd.



U.S. Department of the Interior  
Bureau of Indian Affairs

- Annual Report for the Year Ending June 30, 1951 - Native Resources Division.
- Annual Report for the Year Ending June 30, 1952 - Resources Division
- Annual Report for the Year Ending June 30, 1953 - Resources Division
- Annual Extension Report, January 1, 1954 - December 31, 1954
- Annual Report of Division of Resources, Fiscal Year 1954
- Annual Report of Division of Resources, Fiscal Year 1955
- Annual Extension Report, Branch of Land Operations  
Calendar Year January 1, 1956 - December 31, 1956
- Annual Extension Report, Branch of Land Operations  
Calendar Year January 1, 1957 - December 31, 1957
- Annual Extension Report, Branch of Land Operations  
Calendar Year January 1, 1958 - December 31, 1958
- Annual Extension Report, Branch of Land Operations  
Calendar Year January 1, 1959 - December 31, 1959
- Annual Report, Branch of Land Operations  
Calendar Year 1960
- Annual Report, Branch of Land Operations  
Calendar Year 1961
- Annual Report, Branch of Land Operations  
Calendar Year 1962
- Annual Report, Branch of Land Operations  
Calendar Year 1963
- Annual Report, Branch of Land Operations  
Calendar Year 1964
- Annual Land Operations Report 1965  
Juneau Area Office, Bureau of Indian Affairs
- Annual Land Operations Report 1966  
Juneau Area Office, Bureau of Indian Affairs

Annual Land Operations Report 1967  
Juneau Area Office, Bureau of Indian Affairs

Annual Land Operations Report 1968  
Juneau Area Office, Bureau of Indian Affairs

Annual Land Operations Report 1969  
Juneau Area Office, Bureau of Indian Affairs

Annual Land Operations Report 1970  
Juneau Area Office, Bureau of Indian Affairs

Annual Land Operations Report 1971  
Juneau Area Office, Bureau of Indian Affairs

The Land Operations reports contain data on Native use of several resources for the previous year. Data on arts and crafts, vegetable gardening, sawmill operations and miscellaneous projects is included in most of the reports. The bulk of the reports deals with the reindeer herding projects of various Native herd operators and the Nunivak Development Project at Mekoryuk on Nunivak Island. The format of the reports varies over the years. Generally there is a narrative summary of the herd size and condition, the problems faced by the operator over the past year, and a statistical table summarizing the herd size, number of carcasses sold, number used in herd operations, gross income, reindeer on loan, and range size. Miscellaneous information regarding predator control, cooperative agreements with other agencies, and future plans is also usually included in the reports. The Bureau of Indian Affairs has been unable to obtain data from operators to write a meaningful report since 1971, according to the Juneau Area Director.

U.S. Office of Education (author varies)

...The work of the Bureau of Education for the  
Natives of Alaska (title varies).  
Washington: U.S. Government Printing Office, 1886-1929.

The reports were issued annually for the years 1885/86 through 1917/18. After that date they were issued biennially. Beginning with the 1911/12 report, these reports were issued as Bulletins of the Bureau of Education as follows:

1913 no. 36  
1914 no. 31  
1915 no. 48  
1916 no. 47  
1917 no. 32  
1918 no. 5  
1919 no. 40  
1921 no. 35  
1923 no. 45  
1925 no. 16  
1927 no. 6  
1929 no. 12

The title of the reports varies over the years.

1885/86	Report on Education in Alaska.
1886/87-1898/99	Education in Alaska.
1899/00-1900/01	Education and Reindeer in Alaska.
1901/02-1904/05	Report on Education in Alaska.
1905/06	Report on Education in Alaska and the Introduction of Reindeer.
1906/07	Report on the Alaska School Service and on the Alaska Reindeer Service.
1907/08-1908/09	Report on Education in Alaska.
1909/10-1910/11	Report on Education of the Natives of Alaska and the Reindeer Service.
1911/12-1915/16	Report on the Work of the Bureau of Education for the Natives of Alaska.
1916/17-1926/28	Work of the Bureau of Education for the Natives of Alaska.
1920/22-1926/28	Work of the Bureau of Education for the Natives of Alaska, by Wm. Hamilton.

The reports contain data about school enrollments, buildings, educational progress of students, lists of personnel, activities throughout the school year, domestic science and reindeer. Jackson's reports on the introduction of domestic reindeer (1892-1906) contain detailed accounts of the industry's progress. The Bureau of Education reports often have narratives of the year's activities at a particular school (or reindeer station) written by the teacher assigned to the school. In 1929 the responsibility of administering the reindeer herds in Alaska was transferred from the Bureau of Education to the office of the Governor of the Territory of Alaska who was in turn responsible to the Secretary of the Interior.



U.S. Department of the Interior  
Office of Indian Affairs - Reindeer Service  
J. Sidney Rood (and other authors)  
Circular Letters

Various dates

These circular letters were designed to disseminate information to herders, unit managers and other involved in the Reindeer Service. They contain practical field information for herding, handling and managing reindeer. Circular number 73 (May 10, 1945) for example is entitled "Building a Reindeer Business". The goal of the Alaskan reindeer industry should be to create a business that is similar to that in Lapland. The herds should be approximately 3,000 animals; smaller herds do not operate on the economy of scale that a herd of this size does. The herds should be operated as individual enterprises of herder-owners and their partner herders over a closely watched natural herding unit. The circular letter contains an excellent 16 page summary of the history of reindeer herding up to 1945, with an emphasis on the changing policies of herd ownership, management and control. The social problems involved in herding such as the distribution of reindeer to whites between 1914 and 1937, inheritance of deer by uninterested people, and the joint stock association problems are discussed in some detail. J. Sidney Rood was particularly able to discuss and analyze these matters thoroughly. He had been involved in reindeer work for fifteen years with the Native herders, the Reindeer Service, school teachers Laplanders, non-herders who marketed reindeer products and the reindeer themselves.

United States Department of the Interior  
Bureau of Indian Affairs  
Juneau Area Office

1967      The First Alaskans - 100 Years Later.  
            A Progress Report to the Commissioner  
            of Indian Affairs.  
            Juneau: Juneau Area Office.

This pamphlet summarizes the current programs of the Bureau of Indian Affairs in Alaska to celebrate the centennial of Alaska's purchase. The program of the BIA is emphasized in three major areas, education, economic development and community development. The role of reindeer in economic development is mentioned in connection with the coordinated program begun in 1967 with the State of Alaska, the Bureau of Land Management and the BIA. The state assumed the responsibility for guidance, advice, and promotion in the slaughter process and market phases; BLM manages the range and makes determinations of suitability for new grazing areas and the BIA continues to develop and promote the ranching phases or reindeer operations. The Nunivak Island operation is presented, as is the creation of the BIA Model Herd near Nome.

United States Department of the Interior  
Office of Indian Affairs  
Alaska Section  
D. E. Thomas, Chief of Alaska Section (compiler)

1933 Administration of the Affairs of the  
Natives of Alaska.  
Washington, D.C.: U.S. Government Printing  
Office.

This short (12 pages) report summarizes the population and distribution of natives in Alaska, their education and the administrative organization of the Alaska School Service for the fiscal year 1932. The Reindeer Service was transferred November 1, 1929 from the Office of Education to the Governor of Alaska and a Reindeer Council. The field organization of the Alaska Reindeer Service consists of a general supervisor, five unit supervisors who are in charge of the grazing unit areas, and one clerk-stenographer operating on an appropriation of \$34,300. The report gives a generally optimistic outlook for the future of the industry once the difficulties in allotting grazing areas are resolved, crossbreeding experiments are undertaken, parasites controlled and a market provided.

United States Department of the Interior.  
Task Force on Alaska Native Affairs.  
Report to the Secretary of the Interior.

1962 Report to the Secretary of the Interior by  
the Task Force on Alaska Native Affairs.  
W. W. Keeler, Hugh J. Wade, James E. Officer.

Report describes current conditions of education, welfare and employment assistance, hunting and fishing, health, economic development, land problems, credit operations and village problems and makes recommendations on each. It is noted that economic development has not received the attention of the Bureau of Indian Affairs that health and education have in the past. Reindeer herding, arts and crafts, canaries, tanning and minerals are discussed under economic development. The history of reindeer in Alaska, the changing federal policies towards the industry problems involved with the industry and its current status are briefly presented (pages 44-48). Lack of husbandry knowledge, abandonment of the herds to pursue traditional subsistence activities, predation, and marketing are listed as the major problems to be overcome. The government herding operation on Nunivak Island is mentioned.



U.S. Federal Field Committee for Development  
Planning in Alaska

- 1971 Economic Outlook for Alaska, 1971.  
Prepared by the U.S. Federal Field Committee  
for Development Planning in Alaska, in cooperation  
with the Office of the Governor of Alaska.  
Juneau.

"The primary reindeer grazing areas in Alaska are the Seward Peninsula and Nunivak Island. The reindeer industry has had many management and husbandry problems. In the mid-1930's an estimated 600,000 reindeer grazed the entire coastal tundra area from Barrow on the North to the Alaska Peninsula on the South. Following a collapse of the industry in the late 1930's, reindeer operations concentrated in the Kotzebue Sound-Norton Sound area, mostly on a subsistence basis. By late 1969, only some 31,000 head were located in Alaska, using 22,000 square miles of range area. Suitable range exists for major expansion of commercial production if serious conflicts could be avoided with wildlife species such as caribou, bear, and wolves." (Pg 198).

United States Department of the Interior  
Office of the Secretary

- 1933 Survey of the Alaska Reindeer Service,  
1931-1933.  
Washington, D.C.: U.S. Government Printing  
Office.

This survey reports the results of a two-year study into reindeer management in Alaska. A Reindeer Committee composed of two Congressmen and Charles P. Sisson made findings and recommendations to the Secretary of the interior who accepted them on March 30, 1931. The first steps involved the establishment of a Reindeer Council in Alaska, headed by the Governor of Alaska, and composed of: the Governor as chairman; the Chief, Alaska Division, Office of Indian Affairs; the General Reindeer Supervisor, Alaska Reindeer Service; a representative chosen by the Lomen interests and two Native herd owners. The Reindeer Council and range rules concerning round-ups, marking and percentage ownership of herds were instituted immediately. In the spring of 1932 when Congress appropriated funds, additional personnel were assigned to the newly created management units. In addition, the Secretary of the Interior appointed three special representatives to assist the Governor of Alaska and study the whole reindeer situation. The Lomen interests and their unfair range practices, alleged raids and operations within the newly created management units are reported on. A set of 20 conclusions regarding the survey and new reindeer policy are set forth by the Secretary.



VanStone, James W.

- 1960      A Successful Combination of Subsistence and  
Wage Economies on the Village Level.  
Economic Development and Culture Change  
8(2):174-191.

The author examines the role of wage labor and cash income to the village of Point Hope and the continuation of the traditional subsistence cycle. At the time of contact with American whalers (1850's) the Point Hope people made an unsuccessful attempt to combine traditional subsistence pursuits with trading. Reindeer herding in the region was successful for the years between 1908 and 1945 when it provided meat, skins and labor for some villagers. After 1945 the herd disappeared. Reasons for the failure of herding were numerous, but most significant according to the author is the fact that the Point Hope people are sedentary coastal Eskimos whose seasonal cycle was not adapted to the nomadic nature required of reindeer herders. VanStone concludes that the forward-looking village organization have priorities for civic improvements, and a high standard of living.

- 1962      Point Hope. An Eskimo Village in Transition.  
Seattle: University of Washington Press.

Reindeer were brought into the Point Hope area in 1908. At first the herds grew steadily in size. They were grazed in the region from Cape Beaufort to Cape Thompson and to the headwaters of the Pitmegea and Kukpuk Rivers. Until 1938 the herd size stayed relatively steady, but by 1945 there were only 500 deer left compared to 6,000 in 1933. By 1948 the remaining 250 animals ran off. In the 1920's as herds increased, the individual ownership system grew unmanageable, and in 1926 the herds were counted as a joint stock company. The failure of the reindeer industry in the Point Hope area was unsuccessful for a variety of reasons according to VanStone. Parasites, straying, predation and overgrazing are mentioned but the sedentary nature of coastal Eskimo life and the foreign nature of the routine of close-herding on a nomadic basis is emphasized. (pps 26-27)

- 1967 Eskimos of the Nushagak River - An  
Ethnographic History.  
Seattle: University of Washington Press.

In Chapter V, mining and reindeer herding, the author reports that the Nushagak River region participated only marginally in reindeer herding. Comparisons are drawn between the Point Hope region, where herding drew the natives into the Euro-American economic system. Official versions of the importation of reindeer into the region vary, but the herds were never very large compared to the Kuskokwim River region, and by 1945 the last reindeer had disappeared from the area. "The reasons for the disappearance are doubtless multiple and similar to those that have been noted for the industry in other parts of Alaska: poor herding techniques, predation, disease, marketing problems, and vacillating government policies. The nomadic routine required for good close herding scarcely fitted in with the sedentary pattern of village life traditional to all Alaskan Eskimos. Failure on the part of the government to appreciate this fact was probably the single most important reason for the eventual complete failure of the reindeer herding program (see Oswalt 1963; 45-47; Lantis 1952; VanSton 1962;26-27)." (pg 87)

- 1968 An Annotated Ethnohistorical Bibliography of  
the Nushagak River Region, Alaska.  
Fieldiana: Anthropology 54(2):149-189.

Over two hundred items in English and Russian are included in this bibliography. VanStone lists several references which he found useful in the preparation of the bibliography including Wickersham 1927, Foote and McBain 1964 and Ricks n.d. The primary emphasis of the bibliography is historical; for this region some two hundred years of time is encompassed by the historical period. Very few references deal specifically with reindeer.

Ward, Karl

- 1955      A Study of the Introduction of Reindeer  
            into Alaska. I.  
            Journal of Presbyterian History, 33(4):  
            229-237.
- 1956      A Study of the Introduction of Reindeer  
            into Alaska. II.  
            Journal of Presbyterian History 34(4):  
            245-256.

"Reviews Sheldon Jackson's project to establish a reindeer industry among Alaskan Eskimos: its conception during his visit to northern Alaska in 1890, his efforts to gain support from the U.S. Congress and the general public, his trips of 1891 and 1892 to purchase reindeer in Siberia and establishment of a training station at Teller in 1892. Opposition to his program is outlined and illustrated from contemporary newspapers. Congress made the first appropriation (\$6,000) in March 1893. By fall 1906, Alaska had approximately 13,000 reindeer, 7,000 owned by Eskimo apprentices. Subsequent development of the project and its achievements are sketched."

92930 in Arctic Bibliography 14:1349. 1969.

Weiss, Francis Joseph

- 1941      The Alaskan Reindeer Industry.  
            Washington, D.C.: National Planning Association.

"Contains an outline of the politico-historical background of the introduction of reindeer into Alaska; biological data; technical data regarding the meat, hide and milk and the by-products of the animal; discussion of such economic aspects as herd management, utilization of Alaskan reindeer by the Alaskan Native population; role of the government."

27311 in Arctic Bibliography 4:1153. 1954.



Werth, E

- 1940 Zur Verbreitung und Geschichte der  
Transporttiere.  
Z. Ges. Erdk. Berl., Hefte 5-6, pp. 181-204.

"An account of the origin and dispersal of the common pack and draft animals. Bovids are regarded as the most ancient transport animals, appearing in the late Paleolithic and dominant throughout early history from the Caspian to southeastern India and also in northeastern Asia. Their center of origin is found in India. Cattle were replaced by horses in central Asia (considered the area where horse-taming originated) and northeastern Europe, while Ethiopia is seen as the original home of the domestic donkey. Two other transport animals - yak (Tibet) and llama (Peru) - were only of local significance. The use of reindeer rose probably by association with the domestication of the horse, and the northeast Asian dog-sledge was an outgrowth of the Mongolian plough-culture."

Angras & Reed 1962:106.

Western Meat Industry Magazine

- 1960 Eskimos pack reindeer on Nunivak Island,  
Alaska. April (2 pps)

Short article describing round-up, butchering and marketing of reindeer meat from Mekoryuk, Alaska. Grazing, taxes and labor are not major problems but the current Alaskan reindeer business is not an industry but rather supplemental income for several hundred native families.

Wickersham, James

- 1927 A Bibliography of Alaskan Literature, 1724-1924.  
College: Miscellaneous Publications of the Alaska  
Agricultural College and School of Mines 1(1).

This is the authoritative bibliography for the period covered. Wickersham's bibliography is a very thorough compilation of source materials in both geographic and topical areas. Many of the sources on reindeer are contemporary journal or newspaper accounts, the government publications are also included.

Wiklund, K. P.

1918 Om renskötseins uppkomst. (On the origin of reindeer). Ymer, Arg. 38, Heften 3, pp. 249-273.

"Reviewing the archaeological and paleontological evidence on the early sledge cultures, the author finds that reindeer-breeding arose independently among Chukchi and Koryak (Lapps), but in the Tungusian and Soyotian areas it was a result of cultural influence from Turko-Mongolian horse-breeding."

Angröss & Reed 1962:106.

Wilson, William H.

1975 Alaska Steaks for California Tables.  
Alaska Journal 5(4):205-210.

Article describes the ill-fated enterprise of A.A. Selden and Axel W. Gottlund to market live reindeer in California. Their plan was to ship the reindeer by the newly-built Alaska Railroad to Seward after driving them from their home ranges in Western Alaska. From Seward they would be transported by ship to markets in the lower 48. The Eskimo Sisters Reindeer Co. actually marketed a few reindeer in the 1930's but the depression and opposition by cattlemen ended their business almost as soon as it had begun.

Wissler, Clark

1945 The Domestication of Animals.  
Natural History, New York, Vol. 54, no. 5.  
pp. 200-206.

"In a popular survey of domestication, its sources and the possible motives that caused it are discussed. The author considers it conceivable that not man's activity but the behavior patterns of the animal to become domesticated may have been the first causes of domestication. Dog and pig are regarded as the first animals domesticated; next in order cattle and reindeer were tamed, then sheep followed by goat, still later ass followed by horse, and finally camel and elephant."

Angröss & Reed 1962:108.



Woolford, Ray

- n.d. Notes on Village Economies and Wildlife Utilization in Arctic Alaska. Unpublished Report, U.S. Fish & Wildlife Service, 34 pps. (1954)

During the spring of 1954 visits were made to 12 villages in north-western Alaska (Kobuk, Shungnak, Kiana, Noorvik, Selawik, Noatak, Kotzebue, Kivalina, Point Lay, Wainwright, Point Barrow, and Anaktuvuk Pass). Primary purpose of the visits was to obtain harvest data on caribou. Information on the prices of flour, sugar, tea, coffee, lard, rolled oats, corn meal and milk was also obtained, as was the village human and dog population. The author concludes that at least 15,000 caribou were taken in the area within the preceeding twelve months. Data on unearned income (territorial and federal payments) was gathered, freight charges, and the take of fur and other game animals were recorded. Residents at Noorvik are reported to complain that winter grazing of reindeer in the area west of Noorvik has contributed to the decline of the muskrat population by their grazing. The per capita income for the region averaged \$138.95 and \$791.58 per family.

Zhigunov, P. S. (editor)  
M. Fleischmann (translator)

- 1968 Reindeer Husbandry (Severnoe olenevodstvo). Jerusalem: Israel Program for Scientific Translations. (Available from Clearinghouse for Federal Scientific and Technical Information)

This book contains chapters on the following topics: general outline of the anatomy and physiology of reindeer (L. D. Nikolaevskii), reindeer hygiene (L. D. Nikolaevskii) management and breeding of reindeer (B. V. Preobrazhenskii) reindeer fodder resources (G. I. Karaev), the utilization of reindeer lands (P. S. Zhigunov), reindeer in haulage and commercial hunting (S. P. Popov), slaughter of reindeer primary processing, storage and transportation of the products (S. P. Popov), diseases of reindeer (L. D. Nikolaevskii), control of warble flies and bloodsucking diptera (D. V. Saval'ev), control of harmful predators (V. P. Mokridin) breeding herd dogs (K. V. Mokridina) and farm buildings and structures (N. O. D'yachenko). More than 500 veterinary institutions, staffed with nearly 2000 persons are involved in research and technical services for the Russian reindeer industry's 2.09 million reindeer. Problems facing the Russian industry are similar to those in the United States including the rotation of spring and winter pastures, the improvement of breeding methods, the training of reindeer breeders, the construction of field refrigerated slaughter-houses, and the control of insect pests and predators.



### Section III

#### LIBRARY AND ARCHIVAL SOURCES

Alaska. University of  
Elmer E. Rasmuson Library, Fairbanks, Alaska

There are several important collections at the University of Alaska's Elmer E. Rasmuson Library that contain data pertaining to the reindeer industry. The Skinner Collection at the library holds several thousand volumes that pertain to various topics such as history, exploration, geology, scenery, travel etc. in Alaska. Virtually every book written on the history of Alaska has included at the very least a passing mention of the place of reindeer herding in the Great Land. Countless other volumes dealing with topics that are not strictly historical contain references to reindeer. This is particularly true of books, reports and so on from the early part of the twentieth century. In general, the information in such books and reports is not a good primary source of data for the person interested in history of reindeer herding. Listing all of these books would be an unnecessary expenditure of time. Any general history of the territory or state can be found by looking up "Alaska - history" in the card catalog of a library.

Several collections in the Archives of the Rasmuson Library deserve attention because of their particular relevance to reindeer herding.

The Lomen Family Papers consists of over 60 archival boxes of materials, plus oversize collections totaling 33.9 cubic feet. A 41 page description and inventory of the papers has been prepared by the Library. The importance of the Lomen family's activities in the reindeer herding industry cannot be overstated. In the papers there are letters, notes, manuscripts, photographs and clippings that document the family involvement with reindeer over a period of nearly four decades.

The Don C. Foote Papers include correspondence, notes, research materials, diaries and articles, clippings etc, that relate to his research on the circumpolar region of both North America and Eurasia. Much ecological and geographical information is contained in the extensive files which relate to his participation in Project Chariot (see entries in the Annotated Bibliography). In addition there are notes, maps and diaries relating to his research in Noatak and Kivalina which contain data about the now-defunct reindeer industry in that region. The Noatak BIA reindeer files are included with these other data. Passing mention of the reindeer at Point Hope, the Kobuk River region and Kotzebue is scattered throughout the remainder of the papers.

The Anthony J. Dimond Papers are housed at the Elmer E. Rasmuson Library Archives. They are described in the inventory of these papers written by Paul McCarthy (see the entry under Dimond 1968 in Section II).

The papers and other items of Lawrence John Palmer are in the Rasmuson Library Archives. No published inventory or description of these papers is yet available. They consist of approximately three cubic feet of correspondence, photographs, field notebooks, notes and other papers relating to Palmer's research on ranges in Alaska. Papers from his period of employment with the U.S. Forest Service in the lower 48 are also among these papers. His research on reindeer ranges for the Bureau of Biological Survey 1920 to 1945 forms an important part of the current state of knowledge about reindeer range in Alaska. Other papers and manuscripts are believed to exist, but no one has been able to track them down as yet.

The diary kept by Alfred Karmun of Deering for the Deering Livestock Company 1924-1927 is on microfilm at the Rasmuson Archives. Records include names of the stockholders of the company, records of herd increases, decreases, weather and general comments about conditions among the herd. Information is not complete for all years.

The Arctic Native Brotherhood Collection contains papers, research materials, maps, manuscripts and other items collected during the Imuruk Basin Research Project under the direction of Laurel L. Bland in 1970-1971. The materials include information about Native place names, land use, historic places, archaeological sites and ethnohistory. The record books of the Nome-Douglas Reindeer Association, Kotzebue Sound Reindeer Company, Igloo, Kivalina, Selawik, Deering, Point Lay, Shungnak, Wainwright, and Noatak school records and incidental reindeer data are also included in the collection. Geographic coverage concentrates on the Seward Peninsula, but data on a variety of topics (e.g. school records, reindeer reports, medical reports etc.) and covering a larger area than Seward Peninsula are included.



## Alaska Historical Library, Juneau

The Alaska Historical Library is part of the Division of State Libraries and Museums. The Library is charged with acquiring, preserving and making accessible to the public, publications, manuscripts, photographs and other items that are relevant to Alaskan history. The Library has a number of items that are relevant to reindeer herding in Alaska. Included in these items are a number of rare newspaper and magazine reports about the reindeer industry in its early years in Alaska (1890 to 1920). A total of 79 items appears in the card catalog under the general category of "reindeer". The card catalog entries which were not annotated are listed in Section IV. A collection of 40 to 50 photographs has recently been made from the loose photographs and negatives of the BIA Reindeer Service. These will be accessible, according to Mrs. Zelma Doig, Librarian (personal communication).

In addition to the items listed above, the Library also has micro-filmed some of the records of the Bureau of Indian Affairs Reindeer Service. These records are contained in eleven boxes and one ledger at the BIA offices in Juneau. The reindeer herding documents are arranged alphabetically by herd name and chronologically within each herd. Eight rolls of microfilm contain these records and the microfilms are available on inter-institutional loan. Several hundred files (in the sense that the National Archives uses this term) are included in the microfilm records. Reel 1 of the microfilms contains an alphabetical listing of the files, but the listing is incomplete as a spot check of the microfilms revealed. Generally, the records date from the 1930's through the late 1950's. Items in the files include correspondence, articles of agreement, loans and repayments of reindeer forms, grazing permits, and reports from field personnel in the Reindeer Service. These latter reports constitute an important primary source of data about the reindeer industry. There are no other copies of some of these reports known to the author. The Rachford Committee Report of 1937 is on reel 7. Members of this committee included C. E. Rachford, I. D. Wilson and Frank H. Reeds. Other reports from field personnel include the Nome-Golovin Unit Report by J. Sidney Rood 1934 and the Annual Report of the Superintendent of the U.S. Reindeer Service, 1935.



Federal Records Center, Region 10, Seattle Washington 98115

The Federal Records Center, Region 10 is located in Seattle, Washington. They house a number of records relating to the reindeer industry in Alaska. The most significant are the microfilmed records of the Alaskan Territorial Governor, 1884-1958 which form Record Group 348 of the National Archives and Record Service's system. Other records include RG 22 Records of the U.S. Fish and Wildlife Service and RG 75, Records of the Bureau of Indian Affairs. These are all described below in more detail.

RG 22 Records of the U.S. Fish and Wildlife Service

General Correspondance of the Pribilof Islands, 1972-1958.

These logbooks include the general correspondence, reports etc. relating to reindeer on the Pribilof Islands. For St. Paul Island, the records pertaining to reindeer run from 1928-1933. For St. George Island, they run from 1928-1937. Data include reindeer herd counts, notes on increases and decreases and other information arranged on a chronological basis. There is not yet a published subject list for the 19 rolls of microfilm of these logbooks.

RG 75 Records of the Bureau of Indian Affairs Reindeer Herd  
Reports, 1909-1932, Alitak through York

These reports include both the Annual statistical Report of the Herd at ....., for the year ending 19\_\_ (Form No. 8-910) and the Record of Herders, Apprentices and Owners (Form No. 8-911). The records are not complete runs for the years 1909-1932, in most cases they cover only a few consecutive years. Both forms are not always present for each year. These are the forms which were filled out at an actual reindeer round-up by the teachers or reindeer supervisor for that area.

Alitak	1928-1933
Akularak	1930-1931
Buckland	1915-1918 (No. 1 & No. 2)
Clark-lind Herd, Bethel Council	1931
Deering	1909-1929 (incomplete)
Salt Lake	1909
Cape Douglas Herd	1916
Egavik	1912-1915
Elim	1909-1912
St. Lawrence Island	1930
Camp Collier	1909
Poropirtti	1910-1916
Gambell	1917-1919
St. Lawrence Is.	1921-1925
Golovin	1909-1913 (includes Golovin #2 Nils Klemetson Golovin Mission)
Hooper Bay 1912	1912
Goodnews Bay	1912-1914
Golsovia	1908-1912
Igloo	1909-1926 (includes Herd #1, #2, #3, #4, #3 + 5)
Igiavick (Querqaluak)	1933
Iliamna (Newhalen)	1930
Eagle Bay	1930
Big Mountain	1930
Iglolalik	1910-1913
Kivalina-Noatak Reindeer Company	1929 (includes also Potomeo Herd and Kotzebue Sound Reindeer Company)
Kalskak	1931
Kinnak	1910-1913
Kwigluk	1912, 1913
Kilahalin	1912, 1913
Wood River (Kanakanak)	1931, 1932

RG 75 Records of the Bureau of Indian Affairs Reindeer Herd  
Reports, 1909-1932, Alitak through York

Mint River	1915
Mountain Village	1909-1914
Nome	1913-1916
Noorvik Reindeer Co.	1929
Nulato	1911
Pitmiktalik	1913-1918
Pilot Station (Koyukutuk)	1929
Quiunhagak	1910
Quartz Creek	1917
Shageluk	1930
Savoonga	1930, 1931
Shaktoolik	1909-1916
Shaktoolik #2	1918
Shaktoolik & Bonanza	1921
Shaktoolik & Bonanza Stock Company	1921
Sinuk (Nome)	1908-1919
Sinuk #2 (Quartz Creek)	1916
Shishmaref	1909-1931 (includes #1, #2, #3, #4, Allokeck Mukkituk & Saobluk, John Sinnok, Joseph Enungowuk, Shishmaref Reindeer Association for various years)
Shungnak	1929
Teller	1909-1916
Togiak	1929 (Herd #1, #2, #3, #4)
Tanana	1909-1912
Unalakleet (North and South R.)	1909-1919
Wales	1909-1925 (includes Mission Herd, Mint River Herd, Pingook and Nuluk)
York	1914-1921



RG 348 Records of the Alaskan Territorial Governor 1884-1958

A subject list of a selected series from RG 348 has been prepared by the Federal Record Center. Entitled "Index to the Papers of the Governors of Alaska for the years 1909-1958", edited by Evan Miller, it is available as microfilm publication M939. The printout of the listing gives the microfilm roll number, file group number, file heading number, year, and the subject term of the files' contents. The following information appears on pages 70-71:

4	1	029	1911	Reindeer, Muskoxen, etc.
9	1	029	1912	Reindeer, Muskoxen, etc.
15	1	029	1913	Reindeer, Muskoxen, etc.
29	1	029	1915	Reindeer, Muskoxen, etc.
37	1	029	1916	Reindeer, Muskoxen, etc.
44	1	029	1917	Reindeer, Muskoxen, etc.
51	1	029	1918	Reindeer, Muskoxen, etc.
65	2	29-09	1919	Reindeer, Muskoxen, etc.
75	2	29-09	1920	Reindeer, Muskoxen, etc.
84	2	29-09	1921	Reindeer, Muskoxen, etc.
95	2	29-09	1922	Reindeer, Muskoxen, etc.
103	2	29-09	1923	Reindeer, Muskoxen, etc.
114	2	29-09	1924	Reindeer, Muskoxen, etc.
122	2	29-09	1925	Reindeer, Muskoxen, etc.
135	2	29-09	1926	Reindeer, Muskoxen, etc.
246	2	29-09	1927-28	Reindeer, Muskoxen, etc.
157	2	29-09	1929	Reindeer, Muskoxen, etc.
246	2	29-09	1927-28	Reindeer, Muskoxen, etc.
157	2	29-09	1929	Reindeer, Muskoxen, etc.
163	2	09 PT. 1-8	1930	Reindeer Service-Reports, etc.
164	2	09 PT. 9-17	1930	Reindeer Service-Reports, etc.
174	2	09 PT. 1-4A	1931	Reindeer Service-Reports, etc.
175	2	09 PT. 5-17	1931	Reindeer Service-Reports, etc.
186	2	09 PT. 1-2B	1932	Reindeer Service-Reports, etc.
187	2	09 PT. 2C-17	1932	Reindeer Service-Reports, etc.
191	2	29-09	1932	Reindeer Muskoxen, etc.
233	3	15-04-15	1933-53	Reindeer Allotments - Corresp. Repts.
264	3	39 .	1933-50	Reindeer - Council, etc.
265	3	39 .	1933-50	Reindeer - Contracts, Marketing, etc.
266	3	39 .	1933-50	Reindeer - Expenditures, Predators, etc.
266	3	39 .	1933-50	Reindeer - Regs, Companies, Herds, etc.
197	2	09 PT. 1-6	1933	Reindeer Service-Reports, etc.
198	2	09 PT. 6A-9.	1933	Reindeer Service-Reports, etc.
199	2	09 PT. 13-17	1933	Reindeer Service-Reports, etc.

It was not possible to examine every frame of the 32 rolls of microfilm containing the records relating to reindeer. On some of the microfilm rolls, there is not more than a couple of dozen frames of letters, telegrams, memoranda, etc. On other rolls, there are over a thousand frames of correspondence, reports, telegrams, memoranda, etc. Because the Governor's Office was responsible for the administration of the reindeer industry from 1929 to 1937, there is a substantial increase in the amount of records from this period over the previous years.

As an example of the types of data that are in these records, the following list of the file headings from roll 163, file heading 09 P. 1-8 is given. John W. Troy was the Governor of Alaska in 1930. His office felt the brunt of the reorganization of the administration of the reindeer business when it was transferred to his office on November 1, 1929 by Secretarial Order 380 from the Alaska Division of the Office of Education.

File Heading	Title of File
09	Reindeer - C. L. Andrews
9-1	Associations and Companies
9-2	Appropriations - expenditures, allotments and reports on expenditures.
9-2a	Budget
9-2b	Expenditures - vouchers and contracts
9-3	Experimental areas
9-4	Grazing areas
9-4a	Grazing rules and regulations 1930
9-5	Information requested
9-6	Marketing reindeer - fresh meat
9-6a	Marketing - canned meat 1930
9-6b	Marketing - hides
9-6c	Marketing - live reindeer
9-7	Miscellaneous
9-8	Reorganization

Continued on Roll 164:

9-9	Personnel
9-10	Reports
9-11	Rules and regulations
9-12	Warble fly
9-13	White owners
9-14	Publicity
9-15	Herds
9-16	(not on microfilm)
9-17	(not on microfilm)



National Archives, Washington, D.C.

The National Archives of the United States in Washington, D.C. holds the papers which reflect the nation's official history. Records which relate to a small part of this history, reindeer herding in Alaska, are found scattered throughout many different record groups. Record Group 75, Records of the Bureau of Indian Affairs holds many important records which reflect the early period of importation of reindeer from Siberia. These papers complement the official history of that enterprise as written by Sheldon Jackson in the first sixteen annual reports on the introduction of reindeer into Alaska (see listing under U.S. Government Publications and Jackson relating to reindeer herding in Alaska).

When the administrative jurisdiction over reindeer was switched to the Governor of Alaska office in 1929, the responsibilities of the Office of Territories and Island Possessions increased towards reindeer. Their records cover a period that still brings out bitter memories in many of the older herders minds. The transition from mixed Native and non-Native ownership of reindeer was not an especially smooth one. Coupled with the effects of the Depression in the North, it lingers today as a reminder of the less than successful record of reindeer herding in Alaska. The records in RG 126, Records of the Office of Territories reflect the problems that the industry went through during the 1930's and 1940's. In addition, they support the contention of many people that poor administration of the reindeer herding enterprise by the various federal agencies led to the ultimate failure of the industry.

The Records of the U.S. Fish and Wildlife Service (RG 22) contain many records that relate to the activities of the Bureau of Biological Survey. The Bureau was responsible for reindeer experiments and biological investigations in Alaska at Fairbanks, Nunivak Island and Unalakleet. The correspondence and unpublished reports of the Bureau activities forms a valuable core of information concerning what was known at that time (1920's) about the biology and ecology of reindeer. Warble fly eradication and research into range conditions and utilization were also important aspects of the Bureau's work. The U.S. Fish and Wildlife Service was called into the reindeer business in the 1930's and 1940's to control the predators that were taking a toll of the already declining herds in those decades. The U.S. Fish and Wildlife Service continues to play a role in reindeer herding today through its cooperation with the Alaska Department of Fish and Game in predator control and range management and habitat protection.



Several other record groups are known to hold, or potentially hold information that is relevant to the socio-economic and historical aspects of reindeer herding in Alaska. Record Group 49, Records of the General Land Office should hold data that are relevant to reindeer herding in its surveys of public lands in the Territory and State. Record Group 48, Records of the Office of the Secretary of the Interior, holds data that are relevant to reindeer herding in the Central Classified File. The holdings of the National Archives have not been completely inventoried. A partial listing indicates that the following are available in RG 48, Records of the Office of the Secretary of the Interior:

File Symbol	Title of File	Parts	Dates
General Land Office			
2-147	Grazing on Public Domain Alaska		
	General	1-3	1927-1936
	Western Pacific Livestock Company	1-3	1928-1936
Bureau of Indian Affairs			
5-1	Alaska Indians		
	(Many of the sub-headings may contain reindeer related data).		
Office of Education			
6-4	Alaska Reindeer Service	all	1907-1930
6-5	education in Alaska (School Service)		
	(Many of the sub-headings may contain reindeer related data)		
Territories and Island Possessions			
9-1-10	Alaska...		
	Game - Reindeer		
	Administrative	1	1935-1936
	General	1	1935-1936
	A. A. Selden	1	1935
	Wildlife Sanctuaries	1	1935

This information about the records of the Secretary of the Interior's Central Classified Files comes from a National Archives finding aid. The list "... is intended to provide a complete accounting for the portion of the Central Classified File of the Secretary of the Interior that is in the custody of the National Archives as of the date of completion. This file was begun in 1907 and has been continued in use without substantial changes in the basic scheme. It represents an early stage in the development of classified subject filing, with no pre-determined and comprehensive ordering of subjects." (Final list of Central Files of the Office of the Secretary of the Interior, National Archives, Washington, D.C. unpublished).

The Records of the Marine Revenue Cutter Service are located in the Legislative, Judicial and Fiscal branch of the National Archives. These records ought to contain data of interest to the early history of reindeer herding, when the reindeer were imported from Siberia aboard the U.S.R.C. Bear. The log books of the various revenue cutters of that period should provide some insight into the transportation problems of reindeer marketing in that period. Later, the U.S.M.S. North Star of the Bureau of Indian Affairs carried reindeer meat to markets outside northwestern Alaska in the 1930's and 1940's. The ship's logs detail information about the coordination of slaughtering, loading ship and sailing in northern Alaskan waters (Tom George, personal communication).

Other types of records at the National Archives include photographic records. The holdings of RG 22 and RG 75 are particularly oriented towards the reindeer industry. Many photos, some uncataloged, are in RG 75 in the Photographic Division of the Archives. They are part of 44 boxes of prints: general photography of Indians, 1909-1957, Series N. Many were taken by Ray Dame in 1938 and include scenes of southeastern Alaska, George A. Dale's photographs of herders and activities in 1942, and others dating from the 1920's through the 1950's taken throughout the Territory and depicting Native village scenes and life from the remainder of the collection.

No doubt other record groups at the National Archives contain data that are of interest to the socio-economics and history of reindeer in Alaska. Further research into this treasure trove of data is necessary to locate, record and evaluate its potential contribution to our understanding of reindeer herding in Alaska today.



Introduction Record Group 22: Records of the U.S. Fish and Wildlife Service.

At the present time there is no complete inventory of the Records of the U.S. Fish and Wildlife Service. An inventory is in preparation and should be available shortly (Renee Jaussaud, personal communication). It will contain an administrative history of the Fish and Wildlife Service. Particularly interesting for those interested in reindeer herding is the history of the involvement of the Bureau of Biological Survey. The Bureau became involved in experiments with reindeer and caribou on Nunivak Island in 1920. The cooperative agreement between BBS and the Lomen Corporation was a source of much friction during the 1920's between Natives and non-Natives, and the Lomen interests and the staff of the Reindeer Service. In 1940, the U.S. Bureau of Biological Survey then under the Department of the Interior was merged with the Bureau of Fisheries, under the Department of Commerce, and both became the Fish and Wildlife Service, an Interior Department organization. The U.S. Fish and Wildlife Service was set up in 1956 with a Commissioner. Under him, the Bureau of Sports Fisheries and Wildlife and the Bureau of Commercial Fisheries were set up, both with Directors. The Office of Biological Survey remained an arm of the Bureau of Sports Fisheries and Wildlife. In 1970, the Bureau of Fisheries was transferred to the National Oceanographic and Atmospheric Administration under the Department of Commerce.

The U.S. Fish and Wildlife Service has been involved in predatory animal control in Alaska in varying degrees since the 1930's. Not until after World War II was there an integrated program of predator control, and by then, the great herds of reindeer of the 1930's had been gone for years. Poison bait stations, as well as aerial hunting techniques were used. The programs were never 100% efficient because funding was usually inadequate for the task at hand, and the personnel to hunt wolves and train Natives in the use of poison baits and trapping were not always available.

The records of the U.S. Fish and Wildlife Service consist of the correspondence, telegrams, memoranda, reports, etc. that constitute the internal workings of the Service. The reindeer herd on Nunivak Island established in 1945 for the commercial production of meat by Bureau of Indian Affairs was cooperatively managed by BIA and U.S. Fish and Wildlife Service. The shifting attitude away from research done to increase productivity and control diseases to an attitude of disinterested involvement in a "commercial" operation is documented in the correspondence of the Service.



Record Group 22: Records of the U.S. Fish and Wildlife Service.

Bureau of Biological Survey, General Correspondence, 1980-1944.

Box 1 AG Game-Legislation 1926-1942 ( 5 in.)

Box 2 Alaska Game Law 1943-1950 Legislation  
Alaska Game Law 1932-1939 Licenses  
Alaska Game Law 1939-1953 Licenses

Box 4 Alaska Game Law 1938-1939 Regulations

Box 5 Alaska Game Law 1947-1953 Regulations  
Alaska Game Law A-Z 1937-1940 Commission

Box 6 Alaska Game Commission 1944-1950  
Alaska Game Commission 1950-1953

This box holds the Annual Reports of the Alaska Game Commission for the years indicated. The reports describe the goals, activities and programs of the Territorial Game Commission for the preceding year.

Box 7 Alaska AR-I Lomen Brothers 1926-1942 (1 in.)  
Alaska A-RI Exper. Station Reports (7 in.)  
Alaska Reindeer Investigations Z (3 in.)  
September 17, 1936 - August 2, 1944

Box 8 Alaska Game Law 1934-1937 Regulations

Box 10 A-Z Bears Admiralty Island  
A-Z " " "  
A-Z Solicitor's Opinions  
" " "  
" " "

Box 18 Alaska - Reindeer - Miscellaneous  
December 31, 1934 - December 29, 1939 (2 in.)  
January 23, 1933 - December 21, 1934 (2 1/2 in.)  
A-RI Z January 11, 1932 - March 21, 1932 (1 in.)



Photographs in RG 22 at the National Archives, Washington, D.C.

Two files of black-and-white photographs were examined at the National Archives. Together, they contain approximately 500 pictures. One is labelled "Reindeer" and the other "Alaskans". The Reindeer file is slightly larger than the Alaskan file. The Reindeer file contains photographs, mostly taken in the 1920's, of the activities of the Bureau of Biological Survey taken in connection with reindeer research. Included are photos of the terrain, vegetation types, reindeer races, herding activities, castration, slaughtering, etc. and the conditions under which the men of the Bureau and the Natives lived and worked. L. J. Palmer, W. B. Miller, P. G. Redington and Seymour Hadwen are responsible for taking most of the photos. Virtually all of the photographs have a form stamped on the back and filled in with the date, location, and events depicted in the photograph; the name of the photographer, and the negative number of the photo.

The Alaskans file contains pictures taken by several different photographers at various times. Pictures of reindeer herding activities are included, as are photos of Native houses, clothing, graves, villages and geography. Most of the pictures date from the 1920's and 1930's. Virtually all of them are labelled as described above. Most of the Reindeer and the Alaskans file photographs carry a stamp on the back which indicates that the negative has been destroyed.



Introduction Record Group 75: Records of the Bureau of Indian Affairs.

The Bureau of Indian Affairs has been involved in reindeer herding in Alaska since reindeer were first imported into the Territory in 1892. This introduction will not try to trace that history per se. It will attempt to trace the location of the records that relate to reindeer herding that are kept within Record Group 75 at the National Archives. At times, this tracking down and description of the records will also narrate the complex administrative history and the often controversial social history of reindeer herding. This inventory of the records relating to reindeer herding among RG 75 is by no means complete. Factors of time and other priorities, and the volume of the records prevented the completion of a totally thorough inventory. However, all of the entries described below were examined for records that relate to reindeer herding matters and notes taken on relevant correspondence, reports and other items.

Records of the Bureau of Indian Affairs: Preliminary Inventory 163 (2 Volumes) compiled by Edward E. Hill (The National Archives: Washington, D.C. 1965) is quoted from extensively because it contains excellent summaries of the administrative history of the BIA, and of the transfer of records between various divisions of the Bureau. Permission to quote from Hill was graciously granted by the National Archives and their cooperation and assistance is gratefully acknowledged.

In this bibliography, the term "entry ...." refers to the same entry number made in Hill:1965. Thus, entry 801:231 followed "by Correspondence and reports considered of historic value. 1897-1901" refers to entry 801 on page 231 of Hill:1965, and the title of the entry is Hill's. Where Hill's description of the materials in that entry is used, the description is indented and where a new description is given, it is not indented. Hill's descriptions do not tend to emphasize any particular characteristics of the entry, whereas the new descriptions emphasize the materials that are relevant to reindeer herding.

Not all of the entries that potentially held information relating to reindeer herding were examined. The decision to look at or not to look at a particular entry was made after reading the description of the entry in Hill, and judging whether or not the entry might contain relevant material. Another researcher might have examined other entries using his (or her) own subjective evaluation. All entries that mentioned reindeer, Eskimos and Sheldon Jackson in connection with reindeer herding were examined.

Some of the entries are simply too large to look at all of the items which they contain. The return of information for the amount of time spent looking through them is simply not justified. Two entries which fall into this category are entry 805:231, and entry 806:232. These are the Indexes to General Correspondence, 1910-30 (15 ft.) and General Correspondence, 1908-1935 (96 ft.) respectively. Hill says this about these two entries:

"Consist of three groups of 3" x 5" cards: (1) 1910-26, arranged alphabetically by name of correspondent; (2) 1912-30, arranged alphabetically by place or subject; and (3) 1925-30, arranged by subject, place or name. In each of these groups the cards show name of correspondent and date and subject of letter. Many of them also contain a classification number taken from the classification scheme of the Bureau of Indian Affairs. These cards index the correspondence described immediately below (entry 806)."

"Concerns all of the Division's main functions including its relations with the field establishments. The series consists of letters and telegrams sent, together with reports and many other kinds of enclosures. Arranged by calendar year for 1908 and 1909, thereafter by fiscal year, and thereunder by main and subsidiary subjects varying somewhat from year to year. Card indexes to correspondence for most years are described in entry 805."

Entry 806 has scattered letters and telegrams in the General Correspondence that relate to reindeer herding in Alaska (Dorothy Jean Ray, personal communication). The General Records, 1907-1939 also contain scattered references to reindeer herding in Alaska. These records are described by Hill in entries 121-123. The filing system changed several times, and in order to locate letters of interest, it is first necessary to master the filing system. Hill describes it well in his entries; however, the 8,000 feet + of records were not checked during the research for this bibliography because of their volume. Indexes to the filing system made in 1945 by V. E. Baugh are draft shelf lists of the holdings, and are not necessarily complete or accurate in all respects. This makes the task faced by the researcher extremely difficult because 1) there is no complete listing available of all the holdings, and 2) the volume of records that need to be examined is prohibitive. The draft shelf lists indicate that material is held at the National Archives that relates to reindeer herding in Alaska. For example, the Alaska Division records of the Bureau of Education for the year 1917-18 contain Northwestern District records relating to reindeer, reindeer herders and appointments, missions, and reindeer reservations and grazing lands. Further research into these records at the National Archives would no doubt reveal more records, and contribute to our understanding of the history and social significance of reindeer herding.



Entry 157:58 "A Trip to the Arctic with Uncle Sam"  
1921. 1 reel.

This silent, black-and-white film was made by Liet, R. T. McElligott aboard the U.S. Revenue Cutter Bear during a cruise from Seattle to Point Barrow, the Aleutian Islands and Cape Plover, Siberia. Scenes of Eskimo life, reindeer herding, Siberian Eskimos visiting and the land- and seascape are given in this fifteen minute film. Titles and captions are interspersed with the scenes, many of which show interesting ethnographic details of the period in housing, clothing and personal adornment.

RG 75

Entry 797:228 Records concerning Alaska Reindeer Service.  
1939-42, 1950-53. 2 in.

This file entry is under the Records of the Division of Extension and Industry. Hill says of this division (1965:225-226):

"The Division of Extension and Industry was established on December 5, 1930, as a successor to the Industries Section of the Administrative Division (formerly the Education Division). At first it was known as the Division of Agricultural Extension and Industry, and it was often called simply the Extension Division. Beginning about 1948 there was a series of changes in its name. Its activities since 1955 have been part of those of the Branch of Land Operations."

File contains copies of letters sent, circular letters to local reindeer superintendents and Unit Managers and herders, herd assistant's contracts and conditions of service, samples of forms used in connection with reindeer herding administration, draft of Reindeer Regulations (81 pp 1940), the Eskimos on Bering Strait. A Report of their Economic and Social Conditions by Oscar H. Lipps, Field Representative 1936, correspondence requesting copies of Survey of the Alaska Reindeer Service, 1931-1933 by Trowbridge and Gillman.



Entry 798:230 Letters sent by Commissioners of Education.  
1877-98. (1 in.)

"Loose press copies of letters sent chiefly by Commissioners John Eaton and William T. Harris, whose role in supporting the importation of the reindeer is interestingly documented. Some letters concern certain phrases of Alaskan education and Federal legislation affecting the District of Alaska. Arranged chronologically."

Entry 801:231 Correspondence and Reports Considered of Historic Value. 1897-1901. (1 vol. 1 in.)

This volume contains press-copied materials on miscellaneous topics. The volume is labeled "Alaska/Historical/Metlakahtla" and has the following list of contents on the front cover (page numbers are omitted):

1. Dr. Jackson's report to the Secretary of War on an expedition to Lapland to purchase 500 reindeer
  2. letter from J. H. Condit
  3. statement with regard to Mr. Duncan's work
  4. Mr. Duncan's statement of affairs of Metlakahtla
  5. Mr. Duncan's statement with regard to citizenship of Metlakahtla
  6. letter of W. A. Kjellman with regard to contract for carrying mail
  7. letter of P. C. Richardson to W. A. Kjellman with regard to carrying of mails
  8. letter of P. C. Richardson to Capt. C. E. Crockett with regard to carrying mail
  9. Dr. Jackson's report to the Secretary of Agriculture
  10. memoranda concerning the use of reindeer in carrying mails
  11. papers with regard to Townsley's suit
  12. Governor Brady's letter to Hon. J. A. Henshaw with regard to school appropriation
  13. letter to Secretary of Interior with regard to the Thetis
  14. letter of Assistant Secretary to chairman of Appropriations Committee
- Part I Notes made in Chowchu-Land (Siberia). The Onkilions by Conrad Siem. Introduction 1898.

Entry 802:231 Miscellaneous Letters Sent. 1898-1903  
(3 vols. 3 in.)

"Press copies. Some of the letters concern housekeeping matters. More important are copies of letters sent by the Commissioner of Education and Sheldon Jackson, General Agent for Education in Alaska. Arranged chronologically."

Entry 810:233 Journal of Reindeer Fund Receipts and Expenditures. 1891-1904. (2 vols. 1 in.)

"The first of these informally kept accounting notebooks shows a total of \$2,156 contributed to the fund by individuals during 1891-92. The second volume, for the period 1894-1904, shows the amount of the appropriation for each year and the expenditures charged against it. Entries were made in chronological order."

Entry 811:233 Accounting Ledgers Showing Appropriations, Authorizations, and Expenditures. 1907-1922. (10 vols. 2 ft.)

"Consist of: (1) Appropriation ledgers (6 volumes); (2) Records of Disbursements (1 volume); (3) Record of Authorizations (2 volumes); and (4) Voucher Record (1 volume). The appropriation accounts, 1907-18, are under such major headings as "Reindeer for Alaska" "Medical Relief for Alaska", and "Education of Natives of Alaska". They contain such information as authorization number, date, voucher number, name, amount authorized, and balance. The record of disbursements, 1909-22, shows, on the left page, disbursement information, and on the right page, classifications and amounts of the expenditures, with totals. The record of authorizations, 1910-17, shows, under major functional areas (Reindeer Service, Medical Relief, and the like), the amounts encumbered each quarter at various locations or by individuals, and total authorizations, expenditures, and balances. The voucher record, 1914-17, lists detailed information in each voucher. Under the various sections in these volumes, the entries are mainly chronological."

Entry 812:233 Contracts for the Care, Herding, or Use of Reindeer. 1894-1905. (1 in.)

"These 'agreements' were between Sheldon Jackson, General Agent for Education in Alaska, or his representative, and individuals, missionary societies, and other parties. The principal herders, propagators, and breakers of reindeer were Laplanders employed mainly to teach their knowledge and skills to the Eskimos. Some of the contracts involved loans of small herds to missions. Arranged by contract numbers, 1-47."



This listing gives the names of the parties of the second and in some cases, of the third part in the contracts (party of the first part was the Bureau of Education or its agent) the date of the contract and the principal place of employ for the party of the second part. Most contracts were for one year. Loans were for longer periods of time and subject to repayment. Conditions of the contracts differed greatly between Lapps and Eskimos; generally they were far more beneficial for Lapps who received food, lodging and the use of deer for their own food and clothing as they saw fit.

Entry 814:234 Annual Report Forms on Herds, Herders, Apprentices and Owners of Reindeer. 1912-13, 1916-17. (2 ft.)

"This series consists chiefly of Form No. 8-910, "Annual Statistical Reports of the Herd at \_\_\_\_\_, Alaska, for the Year Ending June 30, 19\_\_"; Form 8-911, "Records of Herders, Apprentices, and Owners"; and Form No. 8-951, "Financial Statement Showing Receipts and Expenditures". Form 8-910 includes data on owners of deer, number of adults and fawns, and increases and decreases in the herds. Form 8-911 contains detailed information concerning owners, herders, and apprentices; it also describes the reindeer herds, including the earmark used to identify each; and includes statistics concerning various phases of herd production and use of reindeer for hauling, transportation, and other purposes. Form 8-951 shows - opposite names of owners - number of deer in herd, receipts from sales of animals products and services of herders, and amounts expended. Arranged by year and thereunder alphabetically by place or station with the three kinds of reports from each location and for each year filed together."

Not all three kinds of reports are filed with every herd for every year. In addition, a few reports from 1918-1920 are also filed with this series.

Entry 820-235 Reference File of William Hamilton, Assistant Chief of the Division. 1888-1926. (9 in.)

"Consists chiefly of descriptive lists, pictures and other records concerning divisional and departmental exhibits at fairs, and expositions: laws, regulations and codes affecting the School, Medical and Reindeer Services; printed copies of congressional bills and acts; newspaper clippings on Alaskan subjects; circular letters and sample forms; and reports, statistical data, and other records on health subjects. Arranged by subject."



Entry 821:235 Clippings. 1897-1908. (2 vols. 3 in.)

These newspaper and magazine clippings come from both foreign and domestic sources. They relate to many different aspects of Alaska, including commerce, mining, communications, roads, railroads, education, etc. The importation of reindeer and the progress of the reindeer industry are particularly well represented. The collection documents some of the prevailing attitudes and hopes for the industry at the time.

Entry 822:236 Executive Orders Concerning Land in Alaska.  
1906 - 34. (4 in.)

"Printed orders that concern withdrawal of land or its restoration to the public domain. Some of them are accompanied by printed maps of the areas affected. Included is a small quantity of correspondence that has some value for background information on the orders. Arranged for the most part by number of Executive Order."

Among the Executive Orders that are relevant to reindeer herding in Alaska are EO 5219, November 5, 1929. Certain described lands in Alaska, lying within the Old Fort Davis Military Reservation, reserved for the use of the Reindeer Service; EO 5352, May 23, 1930. Certain described lands in Alaska reserved for the use of the Bureau of Biological Survey, Agriculture Department, in connection with a reindeer experiment station; EO 5207 October 12, 1929 revokes the EO 2759 of March 30, 1901, which reserved reindeer station lands around the Unalaklik River and Norton Bay, and opens these lands to homesteading; EO 2089 November 21, 1914 sets aside a tract of land about three miles above the source of Riley Channel of the Kobuk River for the use of the Bureau of Education and of the natives of the indigenous Alaskan race who may reside there (Noorvik Reservation).

Entry 823:236 Photographic Negatives and Prints. 1894-1932.  
(1 ft. 3 file drawers)

"A file collected and maintained by the Alaska Division, consisting chiefly of negatives and prints sent in by the local officials in Alaska or visiting officials of the Office of Education. Most of them portray or relate in some way to phases of work carried on by the School, Medical or Reindeer Services and are the work of amateur photographers. The subjects include schools and other buildings, water and land scenes, local and visiting officials, teachers, pupils and aspects of native life. Of interest is a small packet of portraits of Sheldon Jackson. Many prints carry a penciled label giving the time the photograph was taken, the place, and sometimes names of people. Glass and film negatives comprise about three inches of the total and for these there are no matching prints. Negatives and prints are grouped together according to source, subject, or place."

In addition to covering many districts in Alaska, some of the photographs were taken in Petropavlovsk, Kamchatka and the Diomed Islands. King Island is also represented with pictures taken by Arthur Nagozruk, 1929-30. For more photographs and negatives relating to reindeer herding in Alaska, see also entry 157, and the records of the U.S. Fish and Wildlife Service and the Bureau of Indian Affairs held in the photographic section of the National Archives.

While searching through the archives boxes and file drawers containing the records of the Bureau of Indian Affairs in Alaska, a file drawer was located that does not seem to be mentioned by Hill. The drawer was labelled: 3/20/42 Alaska Division, Reindeer Service, Misc. Records 1920-32. The following file folders were in this drawer:

- Number of reindeer in Alaska
- Tyonek, March 1930-February, 1931
- Permit to Lomen Reindeer Corporation
- Reindeer in Broad Pass Region, 1921-28
- Interdepartmental Committee on the Reindeer Industry
- Reindeer 1. General (2 folders)
- " 2. Sale of Reindeer
- " 3. Contracts with Apprentices
- " 4. Reindeer Service

Items in the file folders were mostly correspondence and copies of replies, memoranda and the Government forms relating to the file folder title. The correspondence is particularly significant because it documents the situation in the late 1920's as problems on the reindeer ranges and conflicts between the Native and non-Native herders were reaching a breaking point.



Introduction Record Group 126: Records of the Office of Territories

The Department of the Interior has played the most important role in the administration of Alaska prior to statehood. The Bureau of Land Management and its predecessor the General Land Office, and the Bureau of Indian Affairs dealt more directly than other agencies with matters relating to the reindeer industry. The Office of Territories was established on 28 July, 1950 by Order No. 2577 of the Secretary of the Interior to carry out his responsibilities in the areas noncontiguous to the mainland 48 states. Alaska had been formally established as a Territory by an Act of August 24, 1912 (37 Stat. 512). Its administration as a Territory remained unchanged until Executive Order 6726, 29 May, 1934 by President Roosevelt created the Division of Territories and Island Possessions within the Interior Department, and operations relating to Alaska were transferred to this new Division. These functions included the general supervision of the Governors' Office and, in Alaska, the reindeer industry, the Alaska Railroad, and the Alaska Road Commission.

Supervision of the reindeer industry was transferred from the Office of Education, Alaska Division by Order 380 of the Secretary of the Interior (1 November, 1929) to the Office of the Governor of Alaska. Responsibility for reindeer matters rested with the Alaska Governor's Office until it was returned to the Alaska Division, 1 July, 1937. But the Alaska Division had been transferred in the interim from the Office of Education to the Bureau of Indian Affairs by Order 494 of the Secretary (14 March, 1931). Thus, when responsibility shifted from the Governor's Office back to the Alaska Division, the Alaska Division was then part of the Bureau of Indian Affairs where it has remained since. Responsibility for the reindeer herding operations has changed in degree between various divisions of the BIA since 1937.

The Division of Territories and Island Possessions underwent a name change to the Office of Territories in 1950, but the same administrative organization was retained.

Records created within the Office of Territories after 1951 and an index to the Central Classified Files, 1907-1951 have been retained by the Office of Territories. The holdings at the National Archives amount to 666 cubic feet. Data that relates to reindeer herding is extensive, consisting of 13 archives boxes filed under: File Title 9-1-33 Territories-Alaska-GAME-Reindeer. These holdings total some 15 cubic feet. The majority of the records are from the 1930's, and only occasionally are there any more recent than 1950. With statehood in 1959, the responsibilities of the Office of Territories ceased. The majority of its functions were taken over by various state agencies, or transferred to other agencies of the Department of the Interior.



Title of File

9-1-33 GAME

Dates

Reindeer	
Accounts	1935-40
Administrative	1929-44
Bills of Sale	1907-17
Contracts	1936-38
Diary of an Eskimo Boy	1910
Dr. Ryan's Summary--Reindeer situation, June 7, 1933 (photostat copy)	
Dominion Reindeer Products Co.	1931
Employees	
Applications	1936-37
General	1935-37
Leaves of absence	1936
Personnel	
Briggs, Glenn	1935-39
*Belcher, Dale	1936
Kempton, Edmond F.	1936
Lopp, William T.	1936-37
McCall, Arthur	1937
Rood, J. Sidney	1936-45
General	1918-51
History	1931-38
Investigations	1930-47
Laws and regulations	1931-43
Separate file	1935-36
Legislation	1933-48
Lomen Reindeer Corp.	1929-42
Meat inspection	1929-36
Medd, F. A. G.	1936-39
Protests	1932
Quarters	1934-39
Reports	
Annual	1935-36
General	1905-40
Selden, A. A.	1930-35

\* misspelled Bulcher in original

This list of the GAME - Reindeer file is from pages 34-35:  
Richard S. Maxwell and Evans Walker (compilers)

1963       Records of the Office of Territories, Preliminary  
            Inventory Number 154, Record Group 126.  
            Washington: The National Archives.

Data used to compile the introduction concerning the  
Records of the Office of Territories are from Maxwell and Walker  
(1963) and Stern (1976 bibliographic notes).

RG 126

Box 308

File 9-1-33 GAME-Reindeer-Accounts-General (2 ins.)

File contains accounts, billings, inter-departmental correspondence concerning payments and appropriations for reindeer in Alaska, correspondence re: Lomen's claim against the Buckland Eskimo and Cape Reindeer Companies.

File 9-1-33 GAME-Reindeer-Accounts-Requisitions (1/2 in.)

File contains disbursement orders of funds, correspondence radiograms, etc.

Box 309

File 9-1-33 GAME-Reindeer-Administrative (1/2 in.)

Report (24 pages on oversize paper) entitled "Estimated White-Owned Reindeer in Alaska" prepared by J. Sidney Rood, Acting General Reindeer Supervisor, 24 November, 1937. Marked "secret" in pencil.

File 9-1-33 GAME-Reindeer-Administrative (2 ins.)  
Part #1 October 3, 1929 - September 24, 1932

File contains correspondence, telegrams, budgetary matters, etc.

File 9-1-33 GAME-Reindeer-Administrative (2 in.)  
Part #2 October 3, 1932 - December 13, 1933

File contains correspondence, telegrams etc. some relating to memoranda: estates, "inspection" tags for reindeer meat and other matters.

File 9-1-33 GAME-Reindeer-Administrative (3 in.)  
Part #3 December 17, 1933 - December 31, 1934

File 9-1-33 Alaska-GAME-Reindeer-Administrative (1 in.)  
Part #4 January 4, 1935 - June 22, 1935

File 9-1-33 Alaska-GAME-Reindeer-Administrative

Map 1:500,000 1930. Exhibit A. Lower Kuskokwim District. This black+white copy of an original shows ranges, range factors, areas that are labelled grazed, overgrazed and carrying capacity, etc.

Part #5 June 24, 1935 - October 31, 1939 (1 in.)

Mimeo copies of the Reindeer Committee Hearings held in Washington, D.C. 1931. (\*'d copies not in file)

1st Hearing	February	10	34 pp
2nd Hearing	"	17	38 pp
3rd Hearing	"	19	77 pp
4th Hearing	"	24	49 pp
5th Hearing	"	28	71 pp
6th Hearing	March	6	36 pp
* 7th Hearing	"	9	
* 8th Hearing	"	13	

These Transcripts of the Reindeer Committee Hearings were submitted to the Secretary of the Interior by Ernest Walker Sawyer.

Box 311  
File 9-1-33 Territories-Alaska-GAME-Reindeer-Administrative (3 in)  
Part #6 January 11, 1940 - September 15, 1944

Contains letters, telegrams, memoranda etc. Mostly relating to the acquisition of reindeer from non-Native owners.



File 9-1-33 Territories-Alaska-GAME-Reindeer-Administrative (3 in.)  
Part #6 January 11, 1940 - September 15, 1944

Part #7 February 25, 1932 - March 22, 1932 (1 in)

Dr. Ryan's Summary of the Reindeer Situation (1/2 in)  
(photostat copy 46 pp) June 7, 1933.

Box 312

File 9-1-33 Territories-Alaska-GAME-Reindeer-Administrative (1 in)  
Reports on the Northwestern Livestock Company  
by Louis M. Warren, Project Auditor. January 8, 1935  
75 pp.

File 9-1-33 Territories-Alaska-GAME-Reindeer-Administrative (1 in)  
Appraisal - Cold Storage Plants, Abattoirs, Chilling  
Houses, Corrals, Range Equipment, Fixed Equipment and  
Machinery of Northwestern Livestock Company at  
Baldwin, Egavik, Golovin and Teller Alaska by  
N. Lester Troast, Architect and District Superintendent.  
January 17, 1935 16 pp + Exhibits A-J, maps, photos  
and blue-prints.

File 9-1-33 Territories-Alaska-GAME-Reindeer-Administrative (1 in.)  
Appraisal and Inventory of Nunivak Development  
Company by J. Sidney Rood. October 26, 1937  
55+ pp original, includes an original of the  
July 10-17, 1937 marking and counting sheet at  
Cape Etolin corral handling.

File 9-1-33 Territories-Alaska-GAME-Reindeer-Contracts-General  
Part #1 January 30, 1936 - June 17, 1937 (1/2 in.)

File 9-1-33 Territories-Alaska-GAME-Reindeer-Contracts,  
Invitation, Bid and Acceptance  
Part #1 May 23, 1938 - June 9, 1938 (1 in)

File 9-1-33 Territories-Alaska-GAME-Reindeer-Dominion Reindeer  
Products  
Part #1 October 17, 1931 - November 14, 1931 (1/2 in)

- File 9-1-33 Territories-Alaska-GAME-Reindeer-Employees-Applications-General (1/2 in.)  
March 18, 1933 - September 24, 1937
  
- File 9-1-33 Territories-Alaska-GAME-Reindeer-Employees (1/2 in.)  
James Opland 1936
  
- File 9-1-33 Territories-Alaska-GAME-Research-Employees-General  
Part #1 September 4, 1935 - April 20, 1937 (1 in.)
  
- File 9-1-33 Territories-Alaska-GAME-Reindeer-Employees-Leaves  
of Absence  
Part #1 February 14, 1936 - June 23, 1936 (1/2 in)
  
- File 9-1-33 Territories-Alaska-GAME-Reindeer-Employees-Glenn  
G. Briggs (1/2 in.)  
Part #1 April 18, 1935 - May 27, 1939
  
- File 9-1-33 Territories-Alaska-GAME-Reindeer-Employees-  
J. Sidney Rood (1/2 in.)  
May 1, 1936 - July 17, 1945
  
- File 9-1-33 Territories-Alaska-GAME-Reindeer-Employees-Applications  
Andrew McCall 1936-1937 (1/2 in.)
  
- File 9-1-33 Territories-Alaska-GAME-Reindeer-Employees-  
Applications-William T. Lopp (1/2 in.)  
Part #1 October 2, 1936 - January 1, 1937
  
- File 9-1-33 Territories-Alaska-GAME-Reindeer-Employees-  
Applications-Edmond F. Kempton (1/2 in.)  
March 13, 1936 - September 28, 1936
  
- File 9-1-33 Territories-Alaska-GAME-Reindeer-Employees-  
Applications-Dale Belcher (1/2 in.)  
March 13, 1936 - September 28, 1936

Box 313

File 9-1-33 Territories-Alaska-GAME-Reindeer-General (1 in.)  
Part #1 October 31, 1918 - October 9, 1929

(note on the cover of this file reads "For other correspondence in re:  
reindeer in Alaska see file 6 4 General")

Part #2 October 10, 1929 - February 19, 1930 (1 in.)

Part #3 February 21, 1930 - April 30, 1930 (1 in.)

Part #4 May 1, 1930 - June 30, 1930 (1 in.)

Part #5 September 5, 1930 - August 12, 1931 (1 1/2 in.)

Part #6 September 8, 1931 - February 24, 1932 (1 1/2 in.)

Part #7 February 25, 1932 - April 25, 1932 (1 1/2 in.)

Part #8 April 26, 1932 - December 18, 1934 (1 1/2 in.)

Box 314 Part #9 January 14, 1935 - January 28, 1936 (2 in.)

Part #10 February 13, 1936 - February 23, 1939 (2 in.)

Part #11 March 9, 1939 - June 20, 1951 (2 in.)

File 9-1-33 Territories-Alaska-GAME-Reindeer-General-Maps

1936 map showing area served by the Reindeer Service

1909 map showing range of Barter Island herd

1937 blueprint map showing entire western, northern  
and southwestern Alaskan reindeer ranges and users

Box 314

File 9-1-33 Territories-Alaska-GAME-Reindeer-History (1/2 in.)  
Part #1 January 6, 1931-1935 including copies  
of 1920's legislation and reindeer reports.

Part #2 February 11, 1936 - July 20, 1938 (1/2 in.)

File 9-1-33 Territories-Alaska-GAME-Reindeer Investigations (2 in.)  
Part #1 June 26, 1930 - January 26, 1931



Box 315

File 9-1-33 Territories-Alaska-GAME-Reindeer Investigations (1 in.)  
Part #2 July 21, 1932 - July 20, 1933

Part #3 September 1, 1932 - February 27, 1933 (1 in.)

Part #4 October 30, 1933 - May 7, 1934 (1 in.)

Report (46 pp + cover letter) Special Agent Roy Nash to Director of Investigations, Department of the Interior concerning the Office of General Reindeer Superintendent, November 15, 1933.

Report (145 pp+) Special Agent Roy Nash to Director of Investigations, Department of the Interior entitled "The Alaska Reindeer Situation in 1933" January 11, 1934. (1 in.)

File 9-1-33 Territories-Alaska-GAME-Reindeer-Nunivak Island (1 in.)

Report on the reindeer situation on Nunivak Island by Trowbridge and Gillman (35 pp+ exhibits) September 5, 1932.

Box 316

File 9-1-33 Territories-Alaska-GAME-Research Investigations

Black, 3-ring notebook, gold-embossed on the cover reindeer photographs maps general information Book No. 1. (1 in.)

Black, 3-ring notebook, gold-embossed on the cover Reindeer Charges Answers Book No. 2. (2 in.)

Black, 3-ring notebook, gold-embossed on the cover Reindeer Personal Diary - Ernest Walker Sawyer, other confidential papers. Book No. 3. (1 in.)

File 9-1-33 Territories-Alaska-GAME-Reindeer Investigations

General Story of Reindeer in Alaska by Ernest Walker Sawyer. Book No. 4. (photostats) July-December 1930. (1/2 in.)

General Story Covering Reindeer in Alaska by Ernest Walker Sawyer. Book No. 5. (press clippings) July-December 1930. (1 in.)

General Story Covering Reindeer in Alaska by Ernest Walker Sawyer. Book No. 6. (photostats) July-December 1930. (1 in.)

Box 317

File 9-1-33 Territories-Alaska-GAME-Reindeer Investigations-  
Comments on (1/2 in.)  
Part #1 February 15, 1933 - March 3, 1933

Survey of the Alaska Reindeer Service, 1931-1933. (2 original copies).

File 9-1-33 Territories-Alaska-GAME-Reindeer-Law and Regulations

1907-1931 (2 in.). Includes copies of the relevant Scandinavian laws and regulations concerning reindeer herding.

File 9-1-33 Territories-Alaska-GAME-Reindeer-Legislation

Map, 1923, 1:1,250,000 scale. Cloth-backed map of western Alaska depicting reindeer grazing areas.

File 9-1-33 Territories-Alaska-GAME-Reindeer Investigations

General Story Covering Reindeer in Alaska by Ernest Walker Sawyer. Book No. 7. (Herd Records and Reports). July-December 1930. (2 in.).

File 9-1-33 Territories-Alaska-GAME-Reindeer Investigations, General  
Part #5 October 9, 1935 - July 30, 1947 (2 in.)

File 9-1-33 Territories-Alaska-GAME-Reindeer Law and Regulations  
Part #1 March 23, 1931 - February 1, 1934 (2 in.)

Part #2 June 2, 1935 - November 13, 1943 (2 in.)

File folder containing 1 copy of: Forslag angående Lapparnas Renskotsel M. M. avigivet av 1919 Ars Lappkomitte. Statens Offentliga Utredningar 1923:21. Socialdepartementet. (136 pp)

Box 318

- File 9-1-33 Territories-Alaska-GAME-Reindeer-Lomen Reindeer Corporation  
Part #1 December 18, 1929 - February 26, 1930 (1 in.)  
Part #2 March 12, 1930 - May 19, 1930 (1 in.)  
Part #3 May 22, 1930 - November 25, 1930 (1 in.)  
Part #4 January 6, 1931 - May 17, 1932 (1 in.)  
Part #5 April 20, 1932 - December 22, 1934 (1 in.)  
Part #6 May 7, 1935 - October 26, 1942 (1/2 in.)

Box 319

- File 9-1-33 Territories-Alaska-GAME-Reindeer-Meat Inspection  
Part #1 February 4, 1929 - February 9, 1933 (1/2 in.)  
Part #2 July 9, 1935 - July 30, 1936 (1/2 in.)

- File 9-1-33 Territories-Alaska-GAME-Reindeer-F. A. G. Medd  
Part #1 September 5, 1936 - September 8, 1939 (1 in.)

- File 9-1-33 Territories-Alaska-GAME-Reindeer-Protests  
Part #1 March 27, 1932 - April 7, 1932 (1 in.)  
Part #2 April 7, 1932 - April 14, 1932 (1 in.)  
Part #3 April 15, 1932 - April 22, 1932 (1 in.)  
Part #4 April 23, 1932 - May 3, 1932 (1 in.)  
Part #5 May 11, 1932 - September 9, 1932 (1 in.)

- File 9-1-33 Territories-Alaska-GAME-Reindeer-Quarters  
Part #1 June 1, 1934 - December 14, 1934 (1/2 in.)

Box 320

- File 9-1-33 Territories-Alaska-GAME-Reindeer-Supplies and Equipment  
Part #1 June 4, 1934 - June 2, 1942 (1/2 in.)



- File 9-1-33 Territories-Alaska-GAME-Reindeer-Reports-Annual  
Annual Report of the Supervisor of the United States  
Reindeer Service for the Fiscal Year ending June 30  
1935 by Lyman S. Brewster (1/2 in.)
- File 9-1-33 Territories-Alaska-GAME-Reindeer-Reports-General  
Part #1 December 12, 1905 - June 5, 1934 (1 in.)  
Part #2 November 4, 1936 - June 24, 1940 (1 in.)
- File 9-1-33 Territories-Alaska-GAME-Reindeer, Selden, A. A.  
Part #1 May 29, 1930 - July 22, 1932 (1 1/2 in.)  
Part #2 July 19, 1932 - December 17, 1934 (1 1/2 in.)
- File 9-1-33 Territories-Alaska-GAME-Reservations-Aleutian Islands  
Part #1 January 28, 1913 - October 1, 1930 (1 in.)  
Part #2 December 1, 1930 - August 23, 1934 (1 1/2 in.)

Other files under the "Reservations" entry may contain data that relates to reindeer herding on the following reservations: Aleutian Islands, Fire Island, Nunivak Island and Yak, and also under the "General" sub-heading. See Maxwell and Walker 1963 for more headings under 9-1 Alaska (1963:28-46).

National Anthropological Archives  
Smithsonian Institution, Washington, D.C.

The National Anthropological Archives is the successor to the archives of the former Bureau of American Ethnology. The official records and manuscript collections form a great source of invaluable information for the study of most North American Indian tribal groups. Unfortunately, the material available for the study of reindeer herding socio-economics and history is minimal. There is some chance that a time-consuming search through some of the manuscripts would reveal data relevant to reindeer herding. The titles did not indicate that such an expenditure of time was warranted for the preparation of this bibliography.

The collections of photographs and plates at the National Anthropological Archives has little more in them concerning reindeer herding than do the archival materials and manuscripts. Prints of paintings and drawings by Native artists are included in these collections. Some contain both contemporary sketches of herding operations and some sketches done as early as the 1890's showing reindeer herding and the day-to-day activities of the herders. The recently published book by George Phobus Jr. *Alaskan Eskimo Life in the 1890's as sketched by Native artists* (Washington, D.C.: Smithsonian Press 1972) has prints of many of these scenes.

A copy of The Midnight Sun (volume 1, number 5, October 1906) a newspaper printed at Cape Prince of Wales is in the Archives (4586 Eskimo). A. N. Evans, the school teacher helped with the editing and publishing of this Native newspaper. Articles dealing with the Cape herd, and other bits of news relating to reindeer feature prominently in this issue. No other sources of information relating directly to reindeer herding were found at the National Anthropological Archives.

Library of Congress, Washington, D.C.

The Library of Congress holds a large collection of items that relate to the reindeer industry in Alaska. In addition to the government reports covering the period of time from the 1890's when reindeer were first introduced into Alaska, there are a number of books and articles that deal with reindeer herding in other countries. The law library has copies of the various laws that deal with reindeer movements, herd sizes and grazing areas in the Scandinavian countries. Over seventy-five titles under the general heading of "reindeer" are in the card catalog at the Library of Congress. The majority of these are peripheral to the main subject of this bibliography. They deal with such areas as reindeer physiology and parasites, reindeer in Canada, Lapland, Norway and Sweden and the Soviet Union, and reindeer breeding. In addition, these are written primarily in the language of their country of origin, and, as could best be determined, translations are not readily available for most of them. Sources that are helpful, but beyond the scope of this annotated bibliography are included in Section IV, Unannotated Sources.



#### Section IV.

#### UNANNOTATED SOURCES

The sources in this section come from a number of different places. Some of them are taken from the various bibliographies which were consulted during the preparation of this bibliography. Their source is noted below the entry. Others came from research in the card catalogs of various libraries and archives. Still others were pointed out by colleagues during the bibliographic research.

In general, the sources in this section were not annotated for one of several reasons. Many were impossible to obtain through the usual Inter-Library Loan services available. Others are from popular journals, magazines or newspapers. In most cases, previous experience with sources from these types of publications has indicated that the quality of the data which is contained in the source does not usually justify the time and expense of tracking the source down and obtaining it. Some of the sources in this section are not written in English, and no known translation for the article or book is available. These items are included because of their relevance to reindeer herding in regions other than Alaska. They can thus serve as a useful starting point for persons interested in conducting research on some comparative aspect of reindeer herding. No attempt has been made in this section to compile the ethnographic accounts of reindeer-herding peoples throughout the world. This would entail the preparation of a lengthy bibliography covering most of the circumpolar world and bibliographic sources in many languages other than English. A good starting point for persons seeking this information is Graburn and Strong (1973). Each chapter ends with an annotated bibliography of the sources used in the preparation of the chapter.

The Alaska Dispatch, Alaska Yearbooks  
Golden Spike Edition

1922 Reindeer Industry in Alaska.  
P 24.

Alaska-Yukon Magazine

1909 "The Eskimo and the Reindeer."  
March, Vol. 7, pp. 491-495.

Ref. from Wickersham 1927:287. #5581.

Andrews, Clarence L.

1919 Reindeer in Alaska. Washington Historical Quarterly  
10:171-176. July.

Ref. from Wickersham 1927:287. #5582.

Baxter, Dow. V.

1942 Photographic Foray.  
Michigan Alumnus Quarterly Review.  
48(20):200-210. May 2.

Beasley, Walter L.

1912 Reindeer Progress in Alaska.  
Scientific American Supplement.  
73:17-18. January.

Ref. from Wickersham 1927:287. #5583.

Bell, W. B.

1929 Alaska's Reindeer-Caribou: Experiments in  
Crossbreeding Promise a New and Rugged Animal  
Yet to be Named. American Forests.  
35:17-20. January.

Ref from Fuller 1943:112. #1034.

Bennett, John E.

1899      Introducing the Reindeer into Alaska.  
American Farmer M 6:278-288. October.

Ref. From Wickersham 1927:287. #5584.

Billington, Linda

1972      Background to "Relief Expedition by Reindeer,  
Story by F. S. Pettyjohn" Anchorage Daily  
News, Anchorage, Alaska. November 26.

Brosius, Samuel M.

1906      A Menace to the Reindeer Industry. Indian Rights  
Assn. Publ. No. 75, 2nd Ser. Philadelphia, 7 pp.

Ref. from Wickersham 1927:287. #5585.

Bruce, Miner

1894      Report of Miner Bruce, Teller Reindeer  
Station, June 30, 1893.  
U.S. Bureau of Education, Whole No. 215.  
Washington, D.C.: U.S. Government Printing Office.

Bunnell, Jean

1929      The Alaska Reindeer Industry. Journal of Home  
Economics 21:17-20. January.

Ref from Fuller 1943:112. #1035.

Canada. Royal Commission on Possibilities of Reindeer and  
Musk-Oxen Industries in the Arctic and Sub-arctic Regions.

1922      Report of the Royal Commission Appointed by  
Order-In-Council of Date May 20, 1919. 99 p.  
Appendix II. Review of the Alaskan Reindeer  
Service of the United States Department of  
the Interior as Compiled from the Official  
Reports of the United States Government 41-51.

Ref. from Fuller 1943:112. #1036.



Chard, Chester S.

- 1955 Reindeer Breeding: Types and Origins.  
Davidson Journal of Anthropology 1(1):77-83.  
Summer.

Churchill, Frank C.

- 1906 Reports of Condition of Educational and School  
Service and Management of Reindeer Service of  
Alaska, With Commentary from Educ. Bur. on  
Same. June 176 pp., map. (S. Doc. 483, 59th  
Cong., 1st Sess., in V. 23; 4931).

Ref. from Wickersham 1927:457. #8163.

Current Opinion

- 1921 Alaska is Developing a Big Reindeer Industry.  
June 70:837.

Ref. from Wickersham 1927:287. #5588.

Darling, Frank Fraser

- 1953 Man, Caribou and Lichen.  
Listener 50(1288):767-769. November 5.

34313 in Arctic Bibliography 6:206. 1956.

- 1954 Caribou, Reindeer and Moose in Alaska.  
Oryx 2(5):280-285. August.

34312 in Arctic Bibliography 6:205. 1956.

Doe, J.

- 1930 Reindeer Have Brought Riches to Alaska.  
Compressed Air Magazine 35:3332-3335.  
December.

Ref. from Fuller 1943:112. #1037.

Dufresne, Frank

1924 Reindeer Round-Up. Nature Magazine  
4:328-332. December.

Ref. from Fuller 1943:112. #1038

Dunn, Stephen P. & Ethel Dunn

1963 Transformation of the Economy and Culture  
In the Soviet North.  
Arctic Anthropology 1(2):1-28.

DeArmond, Robert Neil

1969 This Month in Northland History.  
Alaska Sportsmen, 35-37. March.

Evans, Allen Roy

1934a Meat. The Story of the Four Year  
Trek of the Canadian Government Reindeer  
Herd. The Beaver, Outfit 264, Number 4  
26-28, 64. March.

1934b Meat. The Beaver, Outfit, 265, No.  
1:24-27. June.

1934c Meat. The Beaver, Outfit 265, No. 2:14-  
17, 64. September.

1934d Meat. (concluding installment). The  
Beaver, Outfit 265, Number 3:22-25.  
December.

Fawcett, Waldon

1907 The Alaskan Reindeer Herds and Herders.  
Outdoor Life 20:45-48. July.

Ref. from Wickersham 1927:287. #5589.

Findley, Phyllis I.

- 1968      When it's Round-Up Time in Alaska.  
Alaska Airways Magazine 1(1):6-7, 25,  
29. Spring.

Gambell, Francis H.

- 1947      The First Reindeer Mail to Nome.  
Alaska Life 10(4):9, 27-29. April.

Geare, R. I.

- 1911      Importation of Siberian Reindeer.  
Outdoor Life 273:273-275. March

Ref. from Wickersham 1927:287. #5590.

Geographical Review

- 1923      Geographic Record: North America-  
Growth of the Reindeer Industry in  
Alaska. Geographical Review, 13(2),  
301-302. April.

Graburn, Nelson H. H. & Stephen Strong

- 1973      Circumpolar Peoples: An Anthropological  
Perspective.  
Pacific Palisades: Goodyear Publishing  
Co. Inc.

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U.S. Congress. Senate. 76th Cong. 1st Sess.

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U.S. Congress. Senate. 76th Cong. 2nd Sess.

1939 Survey of Conditions of the Indians in  
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Washington, D.C. USGPO.

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263 and 416 (71st Cong.). S. Res. 323 (72nd Cong.). S. Res.  
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Appendix I

Libraries, Archives, and Unpublished Materials

The following libraries, archives, and state and federal agencies were visited by the author during the preparation of this bibliography. Many others were contacted with an inquiry directed at learning the nature and extent of their holdings that relate to the reindeer industry in Alaska.

- Kegoayak Kozga Library, Inc.                      Nome, Alaska
- Elmer E. Rasmuson Library, University of Alaska, Fairbanks  
Archives of the Elmer E. Rasmuson Library.
- State University of New York at Binghamton Library  
Binghamton, New York.
- Suzzallo Library (Pacific Northwest Collection)  
University of Washington, Seattle.
- University of Alaska, Fairbanks  
Wildlife Research Library, Institute of Arctic Biology
- U.S. Fish and Wildlife Service, Anchorage  
Resources Library
- U.S. Bureau of Land Management, Anchorage  
Resources Library
- Arctic Environmental Information and Data Center, Anchorage
- Federal-State Land Use Planning Commission for Alaska  
Anchorage
- Institute of Social and Economic Research  
University of Alaska, Fairbanks
- Federal Records Center, National Archives and Records Service  
Region 10. Seattle, Washington.
- National Archives, National Archives and Records Service  
Washington, D.C.
- Library of Congress, Washington, D.C.
- U.S. Department of the Interior Library  
Washington, D.C.

National Anthropological Archives, Smithsonian Institution  
Washington, D.C.

Bureau of Indian Affairs Records Office  
Washington, D.C.

Alaska Historical Library  
Juneau, Alaska

Bureau of Indian Affairs  
Juneau, Alaska

Z. J. Loussac Public Library  
Anchorage, Alaska

Anchorage Historical and Fine Arts Museum  
Anchorage, Alaska



Libraries and archives which hold data relevant to the socio-economic aspects of reindeer herding in Alaska but which were not examined during the preparation of this annotated bibliography are listed below. The source of information about them is Frederick (1966/67).

Sheldon Jackson Junior College Library, Sitka, Alaska.  
The Sheldon Jackson Alaska Collection and the C. L. Andrews Collection, miscellaneous correspondence and manuscripts of C. L. Andrews and newspapers from Barrow, Juneau, Nome and Seward.

Dartmouth College Library (Stefansson Collection)  
Hanover, New Hampshire.  
C. L. Andrews, The Eskimo and His Reindeer in Alaska. 2 boxes of 80 photographs.

Duke University Library, Durham, North Carolina.  
Page, Robert Newton. Papers. Contain a 1916 report on what had been accomplished among the natives of Alaska with the appropriations granted to the Bureau of Education by Congress.

University of Oregon Library, Eugene, Oregon.  
Lopp, William Thomas. Papers. (1898-1928)  
3,500 letters.  
Andrews, Clarence Leroy, editor, newspaper The Eskimo complete file, additional papers and correspondence.  
Andrews, Clarence Leroy Photograph Collection.  
About 1500 photographic prints of Alaska scenes, including towns, fauna, flora, railroads, glaciers, persons.

Presbyterian Historical Society Library, Philadelphia  
Pennsylvania.  
Jackson, Sheldon. Papers (1856-1908).  
(See Brann 1952 for a complete list of these holdings).

In no sense should this listing be considered complete. Many of the libraries and archives listed by Frederick doubtless contain data on the socio-economic conditions of reindeer herding. However, the descriptions given to Frederick by the institutions he contacted in preparing his list may not have clearly indicated that their holdings related to reindeer socio-economics.

In addition, many places not listed by Frederick hold items that are relevant to reindeer herding socio-economics. For example, the Glenbow-Alberta Institute in Calgary, Alberta holds many photographs taken by the Lomens in Nome and the surrounding region. These photos depict their reindeer herding operations as well as other activities throughout the Seward Peninsula during the period 1900-1935. (Glenbow Archives Series No. 3).

Correspondence with over two dozen individuals who were associated with the reindeer industry at one time has been initiated. These people often have diaries or notebooks which contain valuable information as to the conditions of the reindeer herding enterprise at that time. The people themselves form an invaluable source of information. Their experience and insight into the problems and conditions that beset the industry in the past (and continue to today) should not be overlooked by any person or agency that conducts research. The administration of the reindeer industry has been plagued for a long time with inadequate funds to do the required work, and insufficient personnel to perform an adequate job. The people who were formerly with the Reindeer Service can offer advice, insights and facts about the industry to minimize administrative problems in the future. Their contributions to this bibliographic research were not so much in the form of information about previously unknown bibliographic sources, as they were a sincere interest in and offers to aid the research in any possible way. For their contributions and encouragement, I thank them all.

Several references to manuscripts were found during the bibliographic research. Two of them were in the Alaska Historical Commission's 1974 volume "Writing Alaska's History: A Guide to Research Volume I". The Alaska Historical and Fine Arts Museum has the personal papers and diaries of Thomas Schultz (1881-1964). Schultz came to Alaska in 1908 and was a teacher at Unalakleet, Elim and Shishmaref through 1946. A manuscript of his experiences in Alaska as a teacher and reindeer supervisor is among his papers. Materials also include correspondence, freight lists, receipts, children's notebooks and Christmas cards made by the children whom he taught, and Mrs. Martha Schultz' diaries, 1941-1946.

The other reference in Alaska Historical Commission (1974:119) to a "Diary of a young man who came to Alaska as a herder with the first importation of reindeer" has not yet been located. Correspondence with the person who is supposed to have this diary has been unsuccessful so far. Other manuscripts are in the holdings at the National Archives. Conrad Siem, who later wrote the memorial concerning the importation of reindeer into Canada (1913) wrote of his experiences in Siberia. "Notes made in Chowchu-Land, Part 1 the Onkilions" is part of Record Group 75, Records of the Bureau of Indian Affairs, National Archives, Washington, D.C.

Appendix II

Bibliographies and Search Tools Utilized

Alaska History Research Project 1936-38

Angriss and Reed 1962

Arctic Institute of North America 1953-1971  
(Arctic Bibliography)

Biological Abstracts

Bolton 1927

DeArmond 1974

Dutilly 1949

Foote & McBain 1964

Frederick 1966/67

Fuller 1943

Gunn 1973

Hippler 1970

Ricks n.d.

Rowe 1938

Scott Polar Research Institute Library Catalog

Social Sciences Citation Index

Snodgrass 1968

Speiss 1975

Stern 1975

Sundborg 1942

Tourville 1974

U.S. Government 1973

VanStone 1968

Wickersham 1927



The University of Alaska's Institute of Arctic Biology was established in 1963 by the State Legislature for research and advanced training in bioscience with special reference to the arctic and sub-arctic environments. The Institute is the major research arm of the Division of Life Sciences which includes undergraduate and graduate instruction in all areas of biological sciences, wildlife biology and management, fisheries biology, and anthropology. Research program areas include Animal Sciences (bioenergetics, thermoregulation, hibernation, cryobiology, nutrition, migration, neurophysiology, biochemistry, lipid studies, veterinary science, etc.), Plant Sciences (microbiology, plant physiology, decomposition, nutrient recycling, etc.), Human Science (human physiology, Eskimo and Athapaskan archeology, historical archaeology, physical anthropology, cultural and social anthropology, etc.), and Ecology and Systematics (protein and amino acid sequencing - small mammals, DNA hybridization - birds, butterfly taxonomy and distribution, structure and function of taiga ecosystems, grazing ecology in tundra ecosystems, etc.). The scientific staff of the Institute encompasses an unusual breadth of specialties ranging from field ecology, archaeology, and systematics, through reindeer-husbandry and ecosystem study to physiology and biochemistry.

