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HRES

HB

544

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HB

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Alaska State Legislature
House

HOUSE RESOURCES COMMITTEE

FISH & GAME ISSUES
Alvin Osterback, Chairman

Pouch V, State Capitol
Juneau, Alaska 99811
(907) 465-3715

HEARING NOTIFICATIONS

BILL	DATE INFORMED	LETTER/PHONE	INFORMED	HEARING DATE
HB544	1/18/80	4100	Dept. of Fish & Game To testify: Greg Cook, Exec. Dir. of Boards of Fisheries & Game	1/22/80
	1/18/80	3718	Rep. Parr, Sponsor	1/22/80

// Resources

Greg Cook said
he'd comment on the
supposed membership
matter. Since he
hasn't done it on
paper, I assume
he'll be willing to
comment on your show
this afternoon. End

MEMORANDUM

TO: House Judiciary Committee

DATE January 21, 1980

FILE NO.

FROM: Gregory F. Cook *G. Cook*
Executive Director
Boards of Fisheries and Game

TELEPHONE NO 465-4108

SUBJECT Personal Consumption Fishery;
House Bill 544

In response to the January 21, 1980 telephone request from Sandra Stringer of your office, enclosed is a copy of Proposal #428, Personal Consumption Fishery, which was before the Board of Fisheries during its Fall 1979/1980 regulatory meeting. The proposal was rejected and the Board instead adopted a management plan for the Copper River salmon fisheries (#80-66-FB) which is also enclosed.

BACKGROUND INFORMATION

The Copper River subsistence fishery has existed for many years. Prior to construction of the Richardson Highway, participants in this fishery were mainly local residents. As road conditions improved and more leisure time became available, the number of non-local fishermen increased. These new participants in the fishery have come primarily from the Fairbanks and Anchorage areas.

Increased fishing pressure and poor returns of fish to the Copper River system in recent years has required the Board of Fisheries to take action to restrict commercial, sport and subsistence fisheries in the Copper River area. Restricting these fisheries has been a complex and difficult task. Consequently, the Board has considered a variety of alternatives before taking action. One alternative approach, suggested by the Board itself, was to create a category to be known as "personal consumption" fisheries. Such a classification would remove the fishery from the legislatively-mandated priority of subsistence.

This option was rejected by the Board of Fisheries at their public meeting in December 1979. The Board also rejected a second alternative proposed which called for differentiation among subsistence users by gear type only. The Board elected instead to develop a management plan: The plan's goal is to insure that subsistence needs are met first for those most dependent on the resource. Other subsistence users whose level of dependence is generally lower receive a lower priority as specified in AS 16.05.251(b).

PERSONAL CONSUMPTION FISHERY

428. 5 AAC 41.001-900. PERSONAL CONSUMPTION FISHERY. Establish a personal use category of fishermen that allows the taking of fish by gear not allowed under current sport fishing regulations. Fish taken under the regulations of this chapter could only be used for personal consumption, not for barter, trade, or sale.

The proposed regulation reads as follows:

ARTICLE 1.
STATEWIDE PROVISIONS.

5 AAC 41.001. APPLICATION OF THIS CHAPTER. (a) Regulations in this chapter apply to personal consumption fishing for finfish, shellfish, and aquatic plants.

(b) The regulations of this chapter do not prohibit the personal consumption of finfish, shellfish, or aquatic plants legally taken under the subsistence, commercial, and sport fishing regulations of this title.

(c) The unlawful possession of fish (5 AAC 39.197), the definitions (5 AAC 39.975) and the abbreviations and symbols (5 AAC 39.997) set forth and defined in ch. 39 of this title are applicable to the regulations in this chapter.

5 AAC 41.005. PERSONAL CONSUMPTION FISHING PERMITTED. Finfish, shellfish, and aquatic plants may be taken for personal consumption only as provided in this chapter.

5 AAC 41.010. METHODS, MEANS, AND GENERAL RESTRICTIONS. (a) Fish may be taken for personal consumption only by dip net.

(b) Fish may be taken for personal consumption only by residents.

(c) It is unlawful to buy, sell, trade, or barter personal consumption caught fish or their parts.

5 AAC 41.015. PERSONAL CONSUMPTION FISHING PERMITS AND REPORTS. (a) Finfish, shellfish, and aquatic plants may be taken only under the authority of a personal consumption fishing permit issued by the commissioner or a local representative of the department.

(b) The following permit conditions apply unless otherwise specified by the personal consumption fishing regulations in this chapter:

(1) the numbers of fish taken for personal consumption may not exceed the limits set out in the permit;

(2) permits must be obtained from a local representative of the department prior to personal consumption fishing;

(3) permits must be retained in the possession of the permittee and be readily available for inspection while taking or transporting the species for which the permit is issued;

(4) the permit may designate the species and numbers of fish to be harvested, time and area of fishing, the type and amount of fishing gear and other conditions necessary for management or conservation purposes;

(5) if specified on the permit, each personal consumption fisherman shall keep accurate daily records of the catch involved, showing the number of fish taken by species, location and date of the catch and such other information as the department may require for management or conservation purposes;

(6) personal consumption fishing reports must be completed on forms provided by the department and submitted to the department office from which the permit was issued at a time specified by the department for each particular area and fishery;

(7) if applicable, the total annual possession limit for the permittee must be entered on each permit by the department representative issuing the permit; if applicable the department representative issuing the permit shall require from an applicant documented proof of residency, income, or other criteria required by regulation, or in the absence of such documentation, a signed affidavit setting forth duration of residency, income, or other criteria required by regulation, to determine the applicable annual possession limit and residency of the applicant;

(c) If the return of catch information necessary for management and conservation purposes is required by a personal consumption fishing permit, a permittee who fails to comply with such reporting requirements is ineligible to receive a personal consumption permit for that activity during the following calendar year, unless the permit applicant demonstrates to the department that failure to report was due to loss in the mail, accident, sickness, or other unavoidable circumstances.

5 AAC 41.020. DEFINITIONS. In this chapter

(1) "personal consumption fishing" means the taking, attempting to take or possession of finfish, shellfish, or aquatic plants by an individual for consumption as food by that individual or his immediate family;

(2) "dip net" means a bag-shaped net suspended from a frame, which may not exceed five feet in any outside dimension, is attached to a single handle and is operated by hand.

ARTICLE 12.
PRINCE WILLIAM SOUND AREA.

5 AAC 41.600. DESCRIPTION OF THE PRINCE WILLIAM SOUND AREA. The Prince William Sound area includes all waters of Alaska between the longitude of Cape Fairfield and the longitude of Cape Suckling.

5 AAC 41.605. DESCRIPTION OF DISTRICTS AND SUBDISTRICTS. (a) The Upper Copper River district consists of all waters of the main Copper River from the confluence of the Slana River downstream to an east-west line crossing the Copper River at the confluence of the unnamed stream located approximately 1/4 mile below the U.S.G.S. gauging cable across the Copper River, as designated by Alaska Department of Fish and Game regulatory markers;

(b) the Chitina subdistrict consists of all waters of the main Copper River from the downstream edge of the Chitina-McCarthy Road Bridge downstream to an east-west line crossing the Copper River at the confluence of the unnamed stream located approximately 1-1/4 mile below the U.S.G.S. gauging cable across the Copper River, as designated by the Alaska Department of Fish and Game regulatory markers.

5 AAC 41.610. FISHING SEASONS. In the Chitina subdistrict of the Upper Copper River district, salmon may only be taken from June 1 through September 30.

5 AAC 41.620. LAWFUL GEAR AND GEAR SPECIFICATIONS. Salmon may be taken only by dip net.

5 AAC 41.625. WATERS CLOSED TO PERSONAL CONSUMPTION FISHING. All waters of the Prince William Sound area, except for those in the Chitina subdistrict are closed to personal consumption fishing.

5 AAC 41.630. PERSONAL CONSUMPTION FISHING PERMITS. Salmon may only be taken under the authority of a personal consumption fishing permit. Only one permit per year will be issued to an individual or household.

5 AAC 41.640. PERSONAL CONSUMPTION BAG AND POSSESSION LIMITS. The total annual possession limit for each permit is as follows:

(1) 15 salmon for a permit issued to an individual not a member of a household under (2) of this section;

(2) 30 salmon for a permit issued to the head of a household.

Justification: This is an alternative to existing regulations in response to a request by the Board of Fisheries at the March 1979 meeting.

Proposed by: Staff on request of the Board of Fisheries.

Favor: Jerome M. Messeth (70-71)
CR-FWS Adv.Cmte. (204)
Gastineau Cn.Adv.Cmte. (211)
Kodiak Adv.Cmte. (234)

Oppose: Naknek-Kvichak Adv. Cmte. (116)
Fairbanks Adv.Cmte. (183)
Commercial Fishermen of Cook's Inlet (216)

Action Taken:

ALASKA BOARD OF FISHERIES

COPPER RIVER SALMON MANAGEMENT PLAN

I. INTRODUCTION: The purpose of this plan is to insure an adequate escapement of salmon into the Copper River system and to provide management guidelines for equitable allocation of the harvestable resource.

II. COPPER RIVER SALMON RUN

- A. This policy governs only those salmon which pass the department sonar counters located at the Million Dollar Bridge.
- B. The Commercial Fisheries Division shall manage the Copper River commercial fishery to attain a total escapement into the Copper River of 350,000 salmon to insure that adequate escapement reach the spawning grounds and provide for a sport and subsistence harvest. The desired weekly escapements are shown in Table 1.
- C. The Commercial Fisheries Division shall manage the subsistence fishery on the Copper River consistent with AS 16.05.251(b) and to insure adequate escapement by restricting the subsistence harvest to the following levels (Table 2) based on escapement as determined by sonar evaluations and any other appropriate means.
- D. The department shall prepare application forms to obtain information necessary to determine what persons are qualified to receive subsistence permits described in Section III.

III. PERMITTING

A. Subsistence Permits: Permits may be issued to persons who show the greatest level of need for subsistence salmon on the basis of:

- Customary and direct dependence upon the resource as the mainstay of one's livelihood,
- local residency, and
- Availability of alternative resources.

1. Class A Permit: A Class A Permit may be issued to any person who satisfies all of the following criteria:

a. Dependency

- i. 55 years of age or older
- ii. Annual income of no more than the amount identified in 5 AAC 01.630(b) (2) (B) and as

the income criteria regulation may be from time to time amended.

iii. Use of a fishwheel to catch fish in the Copper River in ten of the last twelve years.

o. Residency

i. Proximity to the resource as determined by Copper River residency as follows:

A Copper River Basin resident is an Alaska resident (as defined in Title 16) who for the preceding twelve consecutive months has maintained his place of residence and voting residence (if applicable) in the area described below and who does not maintain a permanent residence or voting residence elsewhere. The area includes Game Management Units 11, 13-A, 13-B, 13-C, 13-D as described in 5 AAC 90.010 and the Jacksina River drainage to its confluence with the Nabesna River.

2. Class B Permit: A Class B Permit may be issued to any person who is a Copper River Basin resident as defined above.
3. Class C Permit: A Class C Permit may be issued to any state resident who applies to and is determined by the Commissioner of Fish and Game or his delegate as a person who satisfies all of the following criteria:
 - a. Household size of three persons or more,
 - b. Household having one or more persons over 55 years old,
 - c. No more than one full-time employed person in the household,
 - d. Participation in the fishery for eight of the last ten years, and
 - e. Annual household income not to exceed \$10,000.
4. Class D Permit: A Class D Permit may be issued to any resident of the State of Alaska as defined in Title 16.

B. Permitting

1. When escapements of less than 300,000 are projected, the face value (number of fish allowed per permit) of permits as described in 5 AAC 01.630 may be reduced to insure that all permittees would be allowed to fish.
2. When escapement projections improve significantly during the season, face values of permits may be increased up to

full value as described in 5 AAC 01.630.

3. Permits must be returned no later than October 31 or a permit for the following year may be denied as provided in 5 AAC 01.015(c).
4. During closed fishing periods, the Chitina permit issuing station may be closed or operated at reduced hours to reduce manpower costs.

C. Delayed Season Opening

When sonar counts prior to June 1 indicate less than 250,000 projected escapement, the subsistence season opening may be delayed up to ten days to allow more accurate assessment of run strength and confirm appropriate allowable harvest allocations.

IV. COPPER RIVER SUBSISTENCE CHINOOK SALMON FISHERY:

When the Copper River dip net subsistence fishery is closed to the taking of sockeye salmon, it may be open to the taking of chinook salmon between June 1 through July 10, up to seven days per week.

V. COPPER RIVER SUBSISTENCE COHO SALMON FISHERY:

If the Copper River subsistence fishery is closed or restricted because of an inadequate escapement of sockeye and chinook salmon, the fishery may be reopened September 1 for the taking of coho salmon, which constitute the majority of the salmon at that time. By September 1, the escapement of sockeye and chinook salmon has essentially passed through the area. Also by this time, the subsistence fishery effort has decreased and constitutes less than five percent of the total effort on the fishery.

VI. UPPER COPPER RIVER SOCKEYE SALMON SPORT FISHERY:

When projected sockeye salmon escapements to the upper Copper River fall below 250,000, sport fishing for sockeye salmon shall be closed.

VII. COPPER RIVER CHINOOK SALMON COMMERCIAL FISHERY:

During years when commercial sockeye salmon fishery closures are in effect, limited chinook salmon harvests may be allowed under the following conditions:

- A. The incidental catch of sockeye salmon may not exceed ten percent of chinook salmon weekly harvest quotas when less than 250,000 sockeye salmon escapement is projected. When 250-350,000 sockeye salmon escapement is projected, the incidental catch may not exceed twenty percent.
- B. Maximum drift gill net per vessel shall be 150 fathoms of 8 1/4-inch or larger mesh.
- C. Fishing periods may not exceed six hours in length and fishing time will be set to avoid periods of maximized catch potential.

There will be two fishing periods per week unless more than 80 percent of the week's quota is taken during the first period.

- D. When weekly quotas are not obtained, no more than ten percent of that quota may be taken in the following week.
- E. 1. Weekly quotas for 1980 are as follows:

<u>Week*</u>	<u>Harvest Allocation</u>
21	2,000
22	4,000
23	3,000
24	1,000

- 2. Adjustments of up to one week may be made in the overall harvest allocation timing to compensate for seasonal variations due to early or late spring breakup or other environmental conditions.

* Statistical weeks are in numerical sequence beginning with week number one (1), which is the week ending with the first Saturday of the calendar year.

ADOPTED: January 11, 1980
Anchorage, Alaska

NOTE: 6/0

Table 1. Expected upriver escapement by week based upon percent of average weekly sockeye salmon catch from the Copper River District to produce 350,000 desired escapement and 250,000 minimum escapement.**

Date	Week	Average Catch	Years	Percent	Cumulative Percent	Minimum Escapement	Cumulative Escapement	Expected Average Escapement	Cumulative Expected Average Escapement	Minimum Expected Sonar Escapement (Cumulative)	Average Expected Sonar Escapement (Cumulative)	
May	14-20	20	32,602	(9)	4.7	4.7	11,750	11,750	16,440	16,440	*	*
	21-27	21	102,868	(15)	14.8	19.5	37,000	48,750	51,790	68,230	11,750	16,440
	28- 3	22	144,653	(16)	20.9	40.4	52,250	101,000	73,140	141,370	48,750	68,230
June	4-10	23	132,503	(18)	19.1	59.5	47,650	148,650	66,840	208,210	101,000	141,370
	11-17	24	76,753	(18)	11.1	70.6	27,750	176,400	38,840	247,050	148,650	208,210
	18-24	25	61,650	(18)	8.9	79.5	22,250	198,650	31,140	278,190	176,400	247,050
	25- 1	26	48,838	(17)	7.0	86.5	17,500	216,150	24,490	302,680	198,650	278,190
July	2-	27	33,387	(18)	4.8	91.3	12,000	228,150	16,790	319,470	216,150	302,680
	9-15	28	27,032	(18)	3.9	95.2	9,750	237,900	13,640	333,110	228,150	319,470
	16-22	29	16,415	(18)	2.4	97.6	6,000	243,900	8,390	341,500	237,900	333,110
	23-29	30	10,429	(18)	1.5	99.1	3,750	247,650	5,240	346,740	243,900	341,500
	30- 5	31	4,660	(17)	0.7	99.8	1,750	249,400	2,440	349,180	247,650	346,740
Aug.	6-12	32	1,476	(17)	0.2	100.0	500	249,900	690	349,870	249,400	349,180
	13-19	33	298	(13)	0.04		100	250,000	130	350,000	249,900	349,870
										250,000		
AVERAGE		693,564				250,000		350,000 ^A	350,000 ^{AAA}		350,000 ^{AAA}	

^A Escapement upriver.

^{AA} 80,000 - 90,000 additional spawners required for Copper River Delta spawning areas.

^{AAA} Actual escapement requires subtraction of subsistence and sport fishery take.

TABLE 2: COPPER RIVER SUBSISTENCE FISHERY ALLOCATION PLAN

PROJECTED ESCAPEMENT	ALLOWABLE HARVEST	PERMITTEES ^{1/}	LEVEL OF PARTICIPATION
Less than 150,000	3-5,000	Class A ^{2/}	7 days/week
150-200,000	8-10,000	Class A Class B and C	7 days/week 2 days/week (Saturday-Sunday)
200-250,000	13-15,000	Class A Class D	7 days/week 2 days/week (Saturday-Sunday)
250-300,000	18-20,000	Class A Class D	7 days/week 3 days/week (Friday-Sunday)
300-350,000	23-25,000	Class A Class D	7 days/week 5 days/week (Thursday-Monday)
More than 350,000		Unrestricted	

^{1/} No distinction is drawn to gear type.

^{2/} Special permits are estimated to be 25-30 permits

SUMMARY OUTLINE OF TESTIMONY ON HB 544

Prepared by
Gregory F. Cook, Executive Director
Boards of Fisheries and Game
Alaska Department of Fish and Game

Presented to the House Resources Committee
January 22, 1980

HB 544 SEEKS TO PREVENT THE DEPARTMENT AND THE BOARD OF FISHERIES FROM MAKING NEW CATEGORIES OF FISHERIES, SUCH AS "PERSONAL CONSUMPTION" FISHERIES. IN CONTRAST TO THE BOARD OF FISHERIES, NO SUCH AUTHORITY IS CURRENTLY PROVIDED THE DEPARTMENT UNDER TITLE 16. THE ISSUE MAY NOW ACTUALLY BE MOOT SINCE THE BOARD OF FISHERIES REJECTED A PROPOSED REGULATION TO CREATE SUCH A PERSONAL CONSUMPTION CATEGORY AT THEIR DECEMBER, 1979, PUBLIC MEETING. NONETHELESS, YOU MAY FEEL THAT SOME ACTION IS STILL APPROPRIATE. TO ASSIST YOU, I HAVE SOME BRIEF BACKGROUND INFORMATION TO PRESENT.

FIRST, THE COPPER RIVER SUBSISTENCE FISHERY--BOTH FISHWHEEL AND DIPNET--WILL BE MANAGED IN 1980 ACCORDING TO THE COPPER RIVER MANAGEMENT PLAN. (COPIES OF THAT PLAN ARE AVAILABLE.) THE PLAN PROVIDES FOR ALLOCATION OF SOCKEYE SALMON AMONG DIFFERENT ALASKANS BASED ON A VARIETY OF CRITERIA. THOSE CRITERIA WERE SELECTED BASED ON THE MANDATES OF THE "SUBSISTENCE LAW" (CHAPTER 151, SLA 1978), AND EMPHASIZE:

1. CUSTOMARY AND TRADITIONAL DEPENDENCE
2. AVAILABILITY OF ALTERNATIVE RESOURCES
3. LOCAL RESIDENCY

NEXT IT SHOULD BE EMPHASIZED THAT THE LAW MANDATES A PRIORITY FOR ALL SUBSISTENCE USES. THOSE USES TAKE PRIORITY OVER ALL COMMERCIAL AND ALL SPORT USES.

FINALLY, THE BOARD OF FISHERIES IS CONCERNED THAT THE LEVEL OF SUBSISTENCE USE SHOULD, IN MOST INSTANCES, BE KEPT WITHIN CUSTOMARY AND TRADITIONAL LEVELS OF USE. FOR EXAMPLE, IT HAS COME TO THE BOARD'S ATTENTION THAT AN INCREASING NUMBER OF FISHERMEN ARE NOW DRIVING TO RAMPART TO FISH THE YUKON WITH GILLNETS AND PARTAKE OF THE SUBSISTENCE PRIORITY. AN UNLIMITED EXPANSION OF SUBSISTENCE USE IN THIS AREA, AS WELL AS OTHERS, COULD, IN SOME INSTANCES, CAUSE A CLOSURE OF COMMERCIAL AND/OR SPORT FISHERIES. THIS MAY OR MAY NOT BE IN THE PUBLIC'S BEST INTERESTS.

A FUNDAMENTAL QUESTION WHICH YOU MAY WISH TO CONSIDER IN EVALUATING HB 544 IS HOW BROAD DO YOU WISH THE SUBSISTENCE PRIORITY TO BE? AT THE PRESENT TIME, THE BOARD OF FISHERIES MAY CLASSIFY NEW, NON-CUSTOMARY, NON-TRADITIONAL USES AS SOMETHING DIFFERENT FROM SUBSISTENCE. THIS REMOVES THOSE NON-TRADITIONAL ACTIVITIES FROM THE SUBSISTENCE PRIORITY. I SUGGEST THAT YOU LEAVE THIS AUTHORITY TO CLASSIFY WITH THE BOARD OF FISHERIES.

TO EXPRESS YOUR CONCERN FOR THIS ISSUE OF CLASSIFICATION, YOU MAY WISH TO CHANGE THE FORM ONLY OF THIS BILL. THE NEW FORM COULD BE A HOUSE JOINT RESOLUTION. THE RESOLUTION COULD REQUEST PRIOR CONSULTATION WITH THE LEGISLATURE BEFORE THE BOARD MAKES A DECISION TO RECLASSIFY A FISHERY FROM SUBSISTENCE TO ANOTHER CATEGORY. IN THIS MANNER, YOU WOULD LEAVE THE BOARD OF FISHERIES FREEDOM TO CONTINUE TO MANAGE THE RESOURCE, YET STILL MAKE VERY CLEAR YOUR CONCERNS.

THE BOARD OPPOSES PASSAGE OF HB 544. THE BOARD FEELS IT IS IMPORTANT TO PREVENT NEW, NON-TRADITIONAL USES OF FISHERY RESOURCES FROM RESTING UNDER THE BROAD UMBRELLA OF SUBSISTENCE. THE ABILITY TO CREATE NEW CATEGORIES OF FISHERIES IS AN IMPORTANT TOOL IN PREVENTING THE UNLIMITED EXPANSION OF NEW, NON-TRADITIONAL "SUBSISTENCE" FISHERIES.

THANK YOU.

HB

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AGG 125391

2/5/80 - hearing - tabled



Alaska State Legislature

House

HOUSE RESOURCES COMMITTEE

FISH & GAME ISSUES
Alvin Osterback, Chairman

Pouch V, State Capitol
Juneau, Alaska 99811
(907) 465-3715

HEARING NOTIFICATIONS

Cantwell Research Station Reindeer Project

BILL	DATE INFORMED	LETTER/PHONE	INFORMED	HEARING DATE
HB566	2/1/80		Rep. Moss, prime sponsor	2/5/80
	2/4/80	Phone	Reps. Bettisworth, Branson, Carney, Fuller, Hurlbert, Miller, Rogers, Schaefer, Zharoff (Co-sponsors)	2/5/80
	2/4/80		Univ. of Alaska, Fairbanks notified by Rep. Moss's office.	2/5/80



HB 566

UNIVERSITY OF ALASKA, FAIRBANKS
Fairbanks, Alaska 99701
INSTITUTE OF ARCTIC BIOLOGY

November 6, 1979

Representative H. Pappy Moss
P. O. Box 182
Delta, Alaska 99737

Dear Pappy,

I was pleased to have had the opportunity of talking to you in Nome last week but regret we did not have time to discuss the reindeer industry or the Cantwell Reindeer Research Station. Three items are of considerable importance and I will describe them briefly at this time. Hopefully, you will want further information and I will be more than pleased to meet with you at your convenience.

I have a critical need for feed for the research reindeer at Cantwell. In fact, if feed does not become available very soon, I will have to destroy the herd this winter. This situation has come about because of rising costs and falling financial support for research. You mentioned the wisdom of tying the reindeer project into the Delta agricultural project. I have the reindeer, facilities and assistance needed for the required experimental feeding programs. Moreover, these reindeer are not now on a specific research project. Thus, if the State or a farmers coop can donate the feeds needed for the research, I will be pleased to initiate it immediately.

Secondly, the Cantwell Reindeer Station was built and supported almost entirely by federal grants and contracts. The buildings are all from military surplus and most of the construction and maintenance has been done on weekends, holidays, etc. by friends in Cantwell, my graduate student and me. I have now visited nearly every reindeer research station in Scandinavia and in Siberia and I can state without qualification that we in Alaska have the best equipped and most functional station for reindeer research in the world.

The funds that supported this station came from an Atomic Energy Commission Contract that began in 1967 and terminated in 1977. Since that time I have kept the station "open" through small grants from the Bureau of Indian Affairs and the Reindeer Herders Association in Nome (really BIA funds!).

Continued...

UNIVERSITY OF ALASKA
INSTITUTE OF ARCTIC BIOLOGY

Rep. P. Moss

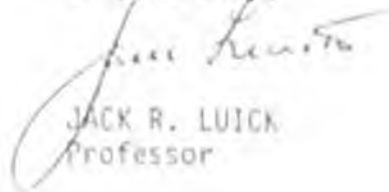
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November 6, 1979

I am most embarrassed by the fact that the station manager, Mr. Danny Berberick, receives no salary for his efforts in keeping the station "presentable", for feeding the reindeer, for conducting tours for the several thousand tourists that visit the station each summer, and for any and all maintenance jobs that attend such a research facility. His only compensation is the privilege of living in a military surplus house trailer - he even has to pay for his own utilities! In brief, there should be some means for state support of this facility and the reindeer, at least until we can build a more elaborate and extensive station on the Seward Peninsula. I will enclose a "bare bones" budget for your consideration.

Lastly, I have been asked and encouraged to submit a supplement to the University of Alaska, Fairbanks budget request to establish research and teaching programs on behalf of the reindeer industry. I will deliver this proposal to Representative Brian Rogers this week. I am also getting letters in support of the proposal from the Reindeer Herders Association, the Nome Chamber of Commerce, village and regional native corporations, and in addition, resolutions passed by the Rural Area Development Council and the Reindeer Sub-Committee of the Alaska Cooperative Land Managers Task Force. I sincerely hope you will give this program your enthusiastic support and that you will encourage your fellow representatives on the agricultural and finance committees to do the same.

Respectfully,



JACK R. LUICK
Professor

JRL/dgh

cc: Rep. P. Moss
Rep. Pat Carney
Lynn Hale

BUDGETS FOR CANTWELL RESEARCH STATION

I. "Bare Bones Budget" to Assure Our Research Potential is Maintained:

Salaries

Station Caretaker @ 25% time	\$ 5,000
Staff Benefits	1,000

Reindeer Feed

12 Reindeer @ \$300/Yr./Reindeer	3,600
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<u>Misc.-Operating Costs and Repairs</u>	<u>2,400</u>
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\$12,000/Yr.

II. "Minimal Operating Budget":

This budget will pay the costs of maintaining and operating the Cantwell Station and in addition, will provide a decent salary for the station caretaker.

Salaries

Station Caretaker @ 50% fulltime	\$10,000
Summer Help (Improvements & Repairs)	6,000
Staff Benefits	2,000

Reindeer Feed

12 Reindeer @ 300/Yr./Reindeer	3,600
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<u>Utilities, Telephone, Fuels, Postage, etc.</u>	<u>2,400</u>
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<u>Supplies and Miscellaneous Expenses</u>	<u>3,000</u>
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Travel

(Intra-state, i.e. delivery of Supplies, Freight)	1,000
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Equipment

(e.g., To Replace Existing Equipment)	<u>2,000</u>
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\$30,000

HB566



KAWERAK, INC.

P.O. BOX 948 • NOME, ALASKA 99762

(907) 443-5231

January 21, 1980

Dr Jack E Luick
University of Alaska
Institute of Arctic Biology
Fairbanks, AK. 99701

Dear Jack:

Received your letter today regarding the Cantwell research station and want you to know that the Reindeer Herders Association enthusiastically supports continued funding of this station until a research center can be developed on the Seward Peninsula.

The need for continued applied research as well as the need for basic research are utmost on our list of priorities. Any discontinuation of such program would indeed be devastating to the growth of the reindeer industry.

We support your actions and wish to heartily thank you and your associates for your efforts in working with us to develop a successful reindeer industry.

Again, we recognize the importance of continuous funding and hope to work closely with you, the House Agriculture Committee and the State Legislature to ensure the continuation of these studies.

Sincerely,

The Reindeer Herders Association
Linda A. Zummer, Coordinator

cc: Bob Dieterich
Pappy Moss
Jack Fuller
Special Agriculture Committee

LZ/pe

(9)

COMMITTEE REPORT

HOUSE

1/18/80

FURTHER: FINANCE

Date: Feb. 5, 1980

Mr. Speaker:

The Committee on RESOURCES has had HB 566

"An Act making a special appropriation to the University of Alaska for support of the Cantwell research station reindeer project; and providing for an effective date."

under consideration and (a majority of the committee) (the committee) reports it back with the following recommendations:

- do pass do not pass
- do pass with attached amendments(s)
- replace with CS for _____ same title
 new title
- and recommends _____
- AND attaches a "Letter of Intent" New Fiscal Note
- reports it back without recommendation
- referred to the _____ Committee

MEMBERS SIGNING
DO PASS

MEMBERS HAVING
OTHER RECOMMENDATIONS:

CHAIRMAN

ALASKA STATE LEGISLATURE

LEGISLATURE SECOND Session

HOUSE BILL NO. 566

By MOSS, BETTISWORTH, BRANSON,
CARNEY, FULLER, TURLBERT,
MILLER, ROGERS, SCHAEFFER
AND ZHAROFF

"An Act making a special appropriation to the University of Alaska for support of the Cantwell research station reindeer project; and providing for an effective date."

Sp appro - Cantwell research station reindeer project

Introduced in the House 1/18, 1960

HISTORY IN THE HOUSE

19 60

Jan. 18

Read first time and referred to Committee on

Resources and Finance

Reported back with recommendation that

Read second time and

Read third time and

PASS Effective Date
Yeas Yeas
Nays Nays
Absent Absent
Excused Excused

Reconsideration

PASS Effective Date
Yeas Yeas
Nays Nays
Absent Absent
Excused Excused

Reported correctly engrossed
Signed by Speaker
Sent to Senate

CHIEF CLERK OF THE HOUSE

HISTORY IN THE SENATE

19

Read first time and referred to Committee on

Reported back with recommendation that

Read second time and

Read third time and

PASS Effective Date
Yeas Yeas
Nays Nays
Absent Absent
Excused Excused

Reconsideration

PASS Effective Date
Yeas Yeas
Nays Nays
Absent Absent
Excused Excused

Reported correctly engrossed
Signed by President
Returned to House

SECRETARY OF THE SENATE

HISTORY IN THE HOUSE

19

Received from Senate

Concurred in Senate amendment thus adopting:
VOTE

Failed to concur in Senate amendment; asked Senate to recede
VOTE

Senate receded from amendment
VOTE

Senate failed to recede from amendment
VOTE

CC appointed by House

CC appointed by Senate

CC adopted by House
VOTE

CC adopted by Senate
VOTE

To enrolling
Reported correctly enrolled
Sent to Governor

by Governor

Filed with Lt. Governor

Chapter No.

SEWARD PENINSULA REINDEER RESEARCH AND EXTENSION STATION

Introduction

Domestic reindeer were first introduced to Alaska in the late 1800's to provide a reliable food supply for the people of Northwest Alaska. While the size and success of the State's reindeer industry has fluctuated over the last 90 years, the need for a dependable meat supply in this part of Alaska remains. Currently, there are about 26,000 head of reindeer in Alaska; most are located on the Seward Peninsula. Recent range studies by USDA's Soil Conservation Service indicate that the Seward Peninsula's carrying capacity is much greater, about 250,000 animals. This number of animals could provide a sustained yield of close to 3 million pounds of meat annually. Reindeer meat is excellent quality and is preferred by Northwest Alaskan residents. In addition, the reindeer industry through the direct employment of herders and the sale of antlers makes a substantial contribution to this region's economy - an area where other economic opportunities are limited.

While the reindeer industry has great promise and can make a significant contribution to Alaska's agricultural development, its growth has been impeded both by a lack of knowledge about reindeer as a livestock animal and the application of already existing knowledge to Alaska's reindeer industry.

The objective of this proposal is to develop a reindeer research and extension station on the Seward Peninsula which would specifically address the research and extension needs of the reindeer industry. The need for such a reindeer station on the Seward Peninsula has been recognized by reindeer herders, scientists and government agencies for a number of years. All other northern latitude nations with reindeer populations have invested much time and money in reindeer research, but Alaska has done very little.

A Seward Peninsula Research and Extension Station would serve as a focal point for educators, researchers, extension agents and the reindeer industry. Applied research, disease control and animal husbandry programs would be the station's initial focus. Extension personnel would analyze and transfer the results of research and techniques developed both at the station and by other nations to the herders. The station also would provide a location for training programs and workshops.

Station Development

The Seward Peninsula Reindeer Research Station will be developed in a series of steps. It is recommended that a Station Advisory Committee composed of one representative each of the Reindeer Herders' Association; Division of Agriculture, Department of Natural Resources; the University of Alaska; and the U. S. Department of Agriculture oversee the planning and operation of the Station.

Until station facilities are constructed, research and administrative staff will work out of the Nome reindeer slaughterhouse. This use of the Nome slaughterhouse makes maximum use of existing facilities and provides a base of operation on the Seward Peninsula while the station's other facilities are being constructed. Initial facilities at the station site will consist of fenced pastures, corrals, one multipurpose building, a bunkhouse, and an animal barn and storage shed. As the station grows, additional facilities can be added.

This facility will complement existing research facilities and teaching programs at the University of Alaska by providing a Seward Peninsula field station.

SEWARD PENINSULA REINDEER
RESEARCH AND EXTENSION CENTER

-Budget-

Category

1000	Personal Services		\$177,000
	Station Manager	\$ 48,000	
	Chief Scientist	70,000	
	Herdsman	40,000	
	Clerical (50%)	9,000	
	Research Assistant (62.5%)	10,000	
	Extension Agents (2)	*	
2000	Travel		11,000
	Advisory Committee	4,000	
	Station Personnel		
	Intrastate	4,000	
	Out of State	3,000	
3000	Contractual Services		143,000
	Research Personnel	100,000	
	Laborer	11,000	
	Laboratory Analyses	7,000	
	Veterinary Services	3,000	
	Charter, freight	10,000	
	Fuel (heat, generator)	10,000	
	Miscellaneous	2,000	
4000	Commodities		33,000
	Veterinary Supplies	3,000	
	Laboratory Supplies	7,000	
	Building Supplies	5,000	
	Office Supplies	1,000	
	Field Research Supplies	3,000	
	Animal feeds	7,000	
	Plant Science Supplies	2,000	
	Fuels, gas	3,000	
	Miscellaneous	2,000	

*The Cooperative Extension Service has budgeted for two reindeer extension agents for the Seward Peninsula (\$162,000). These agents would work out of the Reindeer Station.

-Continue-

Category

5000	Equipment		\$102,000
	Office Furniture	\$ 3,000	
	Office Machines	3,000	
	Laboratory	15,000	
	Carcass Research	5,000	
	Animal handling	1,000	
	Veterinary	8,000	
	Tools	2,000	
	Animal Balance	4,000	
	Communication	1,000	
	Education	10,000	
	Farm	50,000	
6000	Land Buildings		513,000
	Nome Slaughterhouse Renovation/ Lease	35,000	
	Bunkhouse	75,000	
	Fencing	100,000	
	Corrals, Pens	9,000	
	Animal Barn	75,000	
	Generator Shed	9,000	
	Animal Purchases, herd nuclei's (100)	30,000	
	Survey cost (land and site)	30,000	
	Utilities	50,000	
	Animal Research Laboratory Complex	100,000	
7000	Grants, Claims		

GRAND TOTAL \$979,000

REINDEER RESEARCH



INSTITUTE OF ARCTIC BIOLOGY

University of Alaska

Fairbanks, Alaska

FOREWORD

This brochure is presented by the Institute of Arctic Biology chiefly for the benefit of agencies and persons concerned with the development of Alaska's reindeer industry. Additionally, information is provided for scientists and others interested in conducting scientific investigations with reindeer and caribou at the Institute of Arctic Biology and its various Field Stations. Attention is focused on the research and training potential of the Institute's Cantwell Reindeer Research Station, a facility developed in 1967/68 under contract with the U.S. Atomic Energy Commission primarily for studies on the passage of fallout radio-nuclides through arctic and subarctic food chains. In 1973 a grant from the National Institutes of Health enabled us to upgrade the Station to the extent that we can now undertake research activities in direct support of the reindeer industry. As an added benefit, the village of Cantwell is located in the heart of the Alaska Range, adjacent to Mt. McKinley National Park and far from the disturbing influences of urban environments — circumstances that make the Station ideally suited for educational activities such as Reindeer Workshops, Apprenticeship Programs, Conferences, Seminars, etc. The Station also offers living accommodations for students, staff and families as well as an extensive library of scientific reports, review articles, bibliographies and reference volumes from the world's literature on reindeer biology and husbandry.

— J. R. LUICK

ADMINISTRATION

The Cantwell Reindeer Research Station is administered by the University of Alaska through its Institute of Arctic Biology. Research and teaching activities are conducted under grants and contracts awarded by federal and state agencies in furtherance of their proprietary interests, goals and missions. Inquiries for further information regarding use of the Station should be addressed as follows:

Professor Jack R. Luick
Institute of Arctic Biology
University of Alaska
Fairbanks, Alaska 99701, U.S.A.
Telephone: AC907/479 7657

SCIENTIFIC STAFF

A Task Force of scientists and educators from the University of Alaska [Institute of Arctic Biology (IAB), Alaska Cooperative Wildlife Research Unit (ACWRU), Institute of Agricultural Sciences (IAS) and Cooperative Extension Service (CES)], supported by colleagues in the U.S. Bureau of Land Management (BLM), U.S. Bureau of Indian Affairs (BIA) and Alaska Department of Fish and Game (ADFG), has been organized to provide research and educational programs on behalf of the reindeer industry. This Task Force is staffed with specialists representing several areas that concern reindeer herders and several are already working on problems that will be confronting the industry shortly, e.g. transportation corridors across reindeer ranges, chemical pollution of rangelands and rivers, oil and gas pipelines, multiple use of grazing lands, etc.

TABLE OF ORGANIZATION

<u>Name</u>	<u>Affiliation</u>	<u>Area of Interest</u>
A. University Staff that would contribute to research activities		
Luick, Jack R	IAB	Director of Reindeer Research and Educational Programs, Reindeer Husbandry
Dieterich, Robert A	IAB	Co Director, Reindeer Diseases and Veterinary Medicine
McKendrick, Jay D	IAS	Range Vegetation
Scarborough, William B	CES	Marketing and Extension
Thomas, Wayne C	IAS	Economics and Business Management
White, Robert G	IAB	Reindeer Nutrition
B. Collaborators willing to assist in research and educational programs as needed		
Cameron, Raymond D.	ADFG	Reindeer and Caribou Biology/Ecology
Chapin, F. Stuart	IAB	Vegetation Research
Holleman, Dan F.	IAB	Communication Systems
Klein, David R.	ACWRU	Range Ecology and Wildlife Management
Lent, Peter C.	ACWRU	Reindeer Behavior and Predator Control
Mitchell, William W.	IAS	Agronomics
Pegau, Robert E.	ADFG	Range Management
Scott, David	BLM	Land Resources and Management

APPLIED RESEARCH AND EDUCATION

Examples of several educational and research programs are listed to reflect the potential of the University of Alaska through its Cantwell Reindeer Research Station to provide direct and prompt assistance to the reindeer industry. The extent to which these areas and/or programs are activated depends for the most part only upon the level of funding received from concerned agencies.

Short Term Research Programs that could be initiated with minimal delay, results obtained within 1 - 3 years after activation, for example:

Management and marketing problems associated with the development of a reindeer cow/calf operation.

Develop techniques for processing and marketing reindeer antlers by the Reindeer Herders Association for sale to foreign markets.

Study the economic advantages, if any, of producing reindeer steers for market (studies with beef cattle indicate that reindeer herders may receive greater economic return from marketing of reindeer bull carcasses).

Conduct studies on communication systems for locating reindeer herds and for communication networks between home base, reindeer herds, snow travelers, aircraft, etc.

Develop low cost, semi permanent, emergency shelters for herders (transportable, relatively indestructible, etc. such as geodesic domes, Yurts, etc.).

Develop and test various methods of fencing rangelands to control the movement of reindeer (and caribou).

Establish dog kennels to breed and train reindeer herding dogs.

Continuing Programs in applied reindeer husbandry research (could be activated in relatively short time but need support for several years to yield maximum benefits to reindeer herders).

Predator control (including non-lethal methods of predator control to satisfy the concern of naturalists, ecologists, etc.).

Warble fly research.

By-product research (hides, blood, ground meat, bone, etc.).

Import and maintain herds of special reindeer for breeding purposes, e.g. Hargin strains from Siberia, Pearyi reindeer from Spitzbergen, woodland caribou from British Columbia.

Disease research, especially toward the control and/or elimination of brucellosis.

Range management programs and rotational grazing schemes.

Revegetation studies and "cultivated" crop production.

Development of markets for reindeer meat and meat by products.

Emergency feeds and feeding programs to prevent starvation during inclement weather.

Educational and Instructional Programs

Reindeer workshops for novice and/or experienced herders.

Apprenticeship program (instruction and practical experience in reindeer herding to prepare prospective herders for advanced training with experienced herders on the Seward Peninsula).

Specialized courses such as.

Meat cutting and processing.

Antler processing for foreign markets.

Diseases of reindeer.

Breeding and selection programs for herd improvement.

Business management, economics and bookkeeping.

Conferences and seminars for administrators, legislators and/or supervisors.

Reindeer Herder Newsletter (news and research reports).

Paraveterinary training.

Apprenticeship training for herders.

CANTWELL REINDEER RESEARCH STATION

The Cantwell Reindeer Research Station was established during the spring of 1968 to fulfill the need for a research area where studies with reindeer could be conducted under natural grazing conditions. Located along the east boundary of Mt. McKinley National Park (63°23' N, 148°56' W) at Mile Post 319.5, Alaska Railroad, the Cantwell-Broad Pass area has long been grazed by indigenous caribou and moose, and from 1922 to 1928 was the center of a U.S. Government reindeer herding operation.

The Station is located near the junction of the Denali and McKinley highways, approximately half way between Fairbanks and Anchorage. The two sections of land (520 hectares) assigned to the University by the U.S. Department of the Interior, Bureau of Land Management, are approximately 1/3 mile from the village of Cantwell and consist, for the most part, of a relatively treeless hill with discrete areas of typical taiga vegetation. Situated approximately at the top of Broad Pass, elevation 2,250', the area is drained to the north by Cantwell Creek and the Jack River, both tributaries of the Nenana River. Drainage to the south leads to the middle fork of the Chulitna River. The average annual snowfall is 113" (record snowfall 190" in 1946-47) and the average temperature during the coldest month, January, is 2.1°F, while the average high temperature in July, the warmest month, is 52°F (record low -45°F occurred in February 1947 while the record high 89°F was recorded in June 1961).

To date, 28 hectares of this land have been subdivided into 8 grazing paddocks. Lane fences from these paddocks lead to the reindeer handling area, which contains working and cutting corrals, a field laboratory building, and an animal research barn. These buildings provide shelter for the experimenters during inclement weather, laboratory bench space, equipment and supplies for initial treatment and/or preservation of biological samples, and reindeer holding pens, metabolism stalls, etc. Electrical power is supplied by a 5 kw gasoline generator adjacent to the field laboratory building.

The main Station in Cantwell consists of three 10' x 60' house trailers which provide living accommodations for scientists, students and technicians. There is also a 20' x 80' research laboratory, library and study area, an experimental Greenhouse and a Conference Center (under construction). Communication between researchers in the field and at the Station is made possible through a radio communication network that includes aircraft, portable units (on foot, truck, snow machine, etc.) and base station.

Although research efforts have emphasized nutritional and environmental physiology of reindeer, the Station is being used increasingly by wildlife behaviorists, plant and animal ecologists, lichenologists, microbiologists, etc. Because of its location in the heart of the Alaska Range with easy access to both taiga and mountain tundra vegetation and wildlife, the facility has attracted visiting scientists from other states and abroad as well as researchers from within Alaska. Indeed, in so far as is known, the Cantwell Reindeer Research Station is the only facility in the world devoted to studies on the fundamental biology of *Rangifer tarandus*, the reindeer and caribou. In 1972, scientists associated with the Station sponsored the First International Reindeer/Caribou Symposium, a conference that attracted more than 150 reindeer scientists from the several circumpolar nations.

The Station is sponsored by the Institute of Arctic Biology, University of Alaska, the Atomic Energy Commission, and the Cantwell Store (Herman Cotter and Robert Smith, Props.).

BUILDINGS AND LIVING QUARTERS

Office and Living Quarter Buildings (12' x 60'); all utilities and completely furnished.

Staff Headquarters and Living Quarter Buildings (12' x 20'); all utilities and completely furnished.

Bunkhouse (12' x 60'); furnished for six (6) men.

Library and Office (one end of bunkhouse building); library contains a complete collection of research reports, text books and reference books pertinent to reindeer husbandry. Research reports on reindeer production are obtained weekly through a world wide literature searching service (ASCA). Copies of these reports are obtained through arrangement with the University of Alaska library.

Mechanical, Electrical and Plumbing Shop (approximately 250 sq. feet).

Research Laboratory and Veterinary Health Care Building (20' x 80').

Field Research Laboratory (10' x 20').

Field Research Barn (10' x 20').

Feed Storage Shed (10' x 20').

Corrals and Animal Feeding Facility

Experimental Greenhouse.

Conference Center (under construction); this building will be used for workshops, lectures and demonstrations, special briefing sessions, conferences and seminars at various levels, etc. It will also provide office and study areas as well as the library and reference collection.

LABORATORIES AND RESEARCH FACILITIES

Nutrition Research Laboratory; fully equipped.

Meats Research Laboratory; basic equipment including meat saw, meat grinder and large whole carcass grinder on order other equipment undoubtedly will be needed to complete this area.

Veterinary Research Facility including pathology and diagnostic laboratory, surgery, autopsy and post-operative care. This facility is scheduled for completion summer of 1975.

Field Research Barn is available in the fenced grazing area and can be used to supplement research activities in the new research laboratory building. Additional reindeer research facilities are available at the Institute of Arctic Biology where specialized apparatus such as controlled environment chambers, a whole body ^{60}Co irradiator "Bossy Nova", respiration apparatus, etc. are available for intensive physiological and nutritional research studies.

UTILITIES AT THE RESEARCH STATION

Propane, fuel oil, water, telephone, CB radio communication network, electricity (220 volt/3 phase) and sewage disposal system.

VEHICLES

Dodge Crew Cab Truck, two wheel drive.

Dodge Crew Cab Truck, four wheel drive.

Dump Truck (on order).

Dozer with bucket and/or blade (on order).

Two "Sno Tracs" (all terrain vehicles).

Miscellaneous Trailers (water, flat bed, cargo, etc.).

SUPPORTIVE FACILITIES AND EQUIPMENT AT CANTWELL

Boom truck.*

Dozer with Blade.*

Back hoe and bucket loader.*

Grader.*

Restaurant.

Store.

Laundry.

Living quarters.

Garage.

Available storage.

Railroad off loading facilities.

Post Office.

Alaska Department of Fish and Game, Cantwell Station.

Alaska State Troopers, Cantwell Station.

Alaska Railroad; passenger and freight service.

Fairbanks Air Service; passenger and freight service.

* Available for hire at minimal rates.

This figure shows the bunkhouse, greenhouse and the foundation for a log Conference Center which will be used for instructional purposes, seminars, and will also house the reindeer library.



The main office building at the Station Headquarters also functions as a communications center and kitchen.



Reindeer library for use by researchers at the Cantwell Station contains an up-to-date collection of research reports from Reindeer Stations in the USSR, Scandinavia, Canada and Alaska. The world's literature is searched weekly through a computer-programmed searching service and copies of pertinent reports are obtained for our reindeer libraries at Cantwell and at the Institute of Arctic Biology.



Reindeer Research Laboratory also includes areas for surgery and pathology, autopsy, meats research, metabolism and physiology, and a small animal vivarium.



An aerial photograph of the research area and adjacent rangelands. (Panorama Mountain appears in the background.)

Cantwell resident Frank Second Chief is shown feeding the reindeer during winter, 1970.



This photograph shows Cantwell resident Mike Pedro operating a steam jenny to thaw holes in the permafrost for fence posts.



Food storage building (right) and "self-feeder" (left) within the main grazing paddock.



Radioecologists F. W. Whicker (left) and D. F. Holleman are shown weighing a young male reindeer in the Cantwell corral.



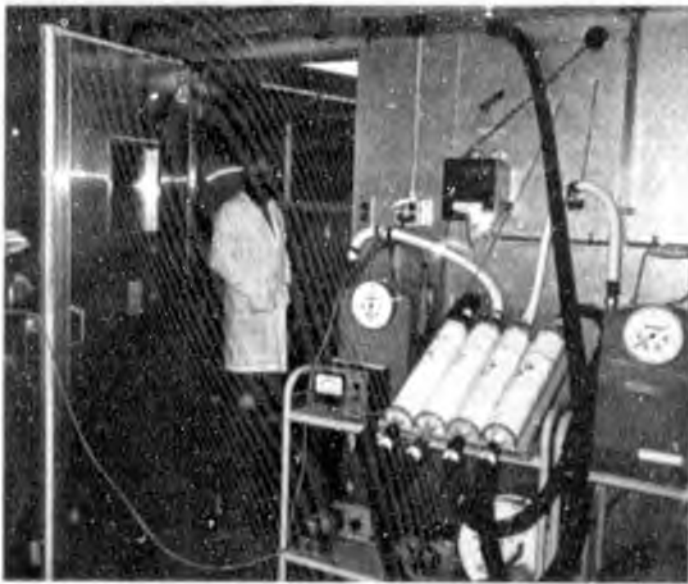
Cantwell resident Bud Carlson is shown at the field laboratory building. Strong winter winds frequently cause severe drifting and compacting of snow, especially in the immediate vicinity of corrals and research buildings.



All-terrain vehicles "Sno-Trecs" and pickup trucks are available for researchers working in the field.



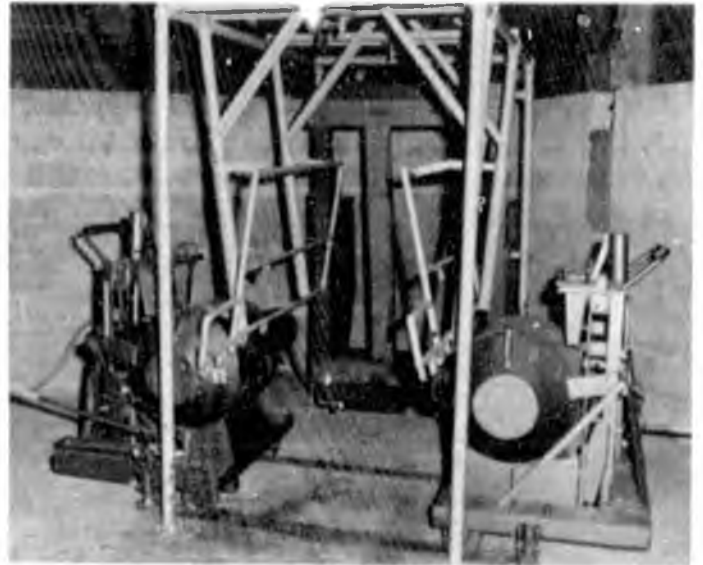
This photograph shows hand-picked lichens (left) and lichens that have been made into pellets (right) for use during nutrition experiments.



This photograph shows J. R. Luick standing inside the controlled environment chamber at the Institute of Arctic Biology where two reindeer are being maintained for studies on the effects of environment on body composition.



J. R. Luick (left) and D. F. Holleman (right) are shown discussing the liquid scintillation counter that is used to measure radioactive isotopes in various biological samples.



Cobalt-60 (^{60}Co) irradiator at the Institute of Arctic Biology which is used for studying the effects of ionizing radiation on body function.



The photograph shows the portable scintillation counter being used to measure the radioisotope body burden of male reindeer "Pierre".



Visiting Norwegian scientist Dr. Hans Staaland collects a sample of saliva from an esophageal fistulated reindeer. This fistula also enables researchers to collect samples of food actually selected by the reindeer while grazing on rangelands.



J. R. Luick measuring the depth of the rump fat pad (in this case, 3") that was deposited on a well nourished male caribou during the brief summer period of fattening.

Dr. R. G. White observes an experimental reindeer that is fitted with a respiration mask for studies on its energy requirement during various types of activity.



Reindeer "Pierre" has a full set of antlers by mid June. The growth of this antler rack was induced by changing the length of daylight hours.



Cantwell resident Tex Allbright holds a large gray wolf which he trapped along the fence lines at the Cantwell Reindeer Station during the winter 1968-69.



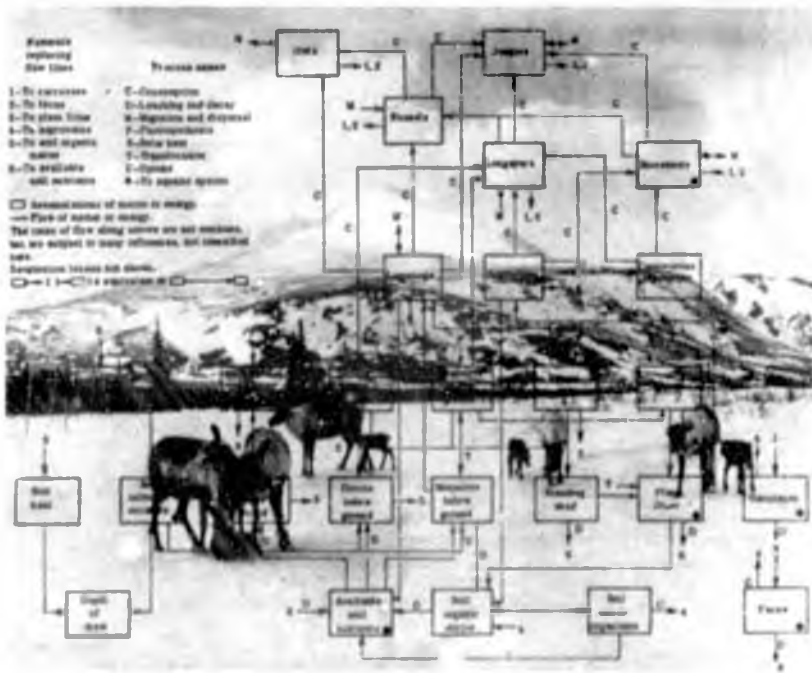
Norwegian reindeer scientist Eigel Reimers (left) and Dr. R. G. White have just obtained a sample of reindeer milk.



Drs. M. K. Yousef (left) and R. D. Cameron (right) are shown inserting a tube into the rumen of a reindeer. This tube will be used to remove samples of fluids and food from the reindeer's stomach when needed for the experimental study.



Research scientist M. K. Yousef with reindeer "Pierre" during an experiment to determine the heat production of reindeer during summer. Dr. M. Yousef is now stationed at the University of Nevada at Las Vegas.



This photograph shows an overlay block diagram of a proposed model for an arctic ecosystem. Research with reindeer at Prudhoe Bay, sponsored by the International Biological Programme, provided information needed to complete and make operational this model.

From left to right, research assistant Steve Person, Dr. White and veterinary student Paul Frelter, performing field surgery on a tranquilized caribou at Prudhoe Bay.



Dr. Robert White and Paul Frelter leading two reindeer to a new grazing area at Prudhoe Bay, summer 1972. These reindeer were flown from the Cantwell Research Station to Prudhoe Bay for studies relating to caribou biology in the vicinity of the oil fields.

Ecosystem studies included determining the role of maternal milk in the nutrition and energy balance of her calf, seasonal changes in milk composition and the effects of nutrition on milk synthesis. The photograph shows the lactating female cow with a rumen fistula plug and a backpack for instruments needed for the continuous infusion of ^{14}C -labeled metabolites.





Dr. Robert G. White lectures students on the importance of nutrition in successful reindeer breeding.



Extension specialist Bill Scarborough demonstrates a tanning method as one way to utilize reindeer by-products.



Veterinarian Robert Dieterich shows students how to judge the age of reindeer by examining teeth.

Instructor Robert A. Pegau, Alaska Department of Fish and Game (Nome) shows a species of lichen to Robert Akpik (Point Lay). Others in the photograph are, left to right, Nancy Akpik (Point Lay), Dr. R. D. Cameron (ADF), Chuck Wheeler (Nome), Dr. R. G. White, Ed Shavings and Dale Smith (Nunivak Island), Rob Tidd (BIA, Bethel) and Norman Ongtowasuk (Wales).





Students Abel Akpik (left) and Dale Smith (right) practice roping reindeer "cowboy style".



Participants in the Reindeer Herders Workshop watch veterinarian R. A. Dieterich castrate a young male reindeer. Students shown standing, left to right, are Norman Ongtowsruk (Wales), Chuck Wheeler (Nome), Jimmy Kvamme (Aniak), Bill Scarborough, Instructor, University of Alaska, Bob Tidd (BIA, Bethel) and Ed Shavings (Nunivak Island).



Veterinarian R. A. Dieterich shows Kvamme how to clean and dress a wound that has been contaminated with insect larvae.



Two aircraft were used to demonstrate techniques for locating a reindeer herd to participants in the Reindeer Workshop. Pilot veterinarian Robert Dieterich demonstrated how radar and other all-weather aircraft locator techniques can be used to find reindeer regardless of weather conditions. Alaska Department of Fish and Game range specialist Bob Pagan (Nome) also used the aerial classroom technique to instruct students on evaluation of reindeer ranges from the air.



In August 1974 three reindeer scientists from the USA visited Soviet Reindeer Stations at Norilsk and Yakutsk in Siberia. The photograph shows the USA and USSR reindeer group on the tundra ranges near Norilsk. USA scientists included D. R. Klein (left), Cooperative Wildlife Research Unit, James Hemming, Bureau of Land Management (third from left), and J. R. Luick, University of Alaska (sixth from left). Soviet scientists Edward Borozdin, A. D. Mukhachev and Nadia Borozdin (second, fourth and fifth from left, respectively) represent the Extreme North Agricultural Research Institute at Norilsk.

Three scientists from the USSR visited the Cantwell Station during summer 1974. These included Professor V. L. Kontrimavichus, Institute of Biological Problems of the North, Magadan (second from left), Dr. V. D. Denisov, Department of Nature Preserves, Moscow (fifth from left) and Dr. V. Borisov, Central Laboratory on Nature Conservation, Moscow (kneeling).



Dr. Edward Borozdin and Chief herder Spiridon Balin, kneeling center, point out symptoms of brucellosis in a male reindeer. Photograph taken on tundra range near Norilsk, Siberia.



This photograph shows Dr. Robert White explaining research activities to the Soviet delegation at the Cantwell Reindeer Station, September 1974.



In 1972, reindeer scientists at the University of Alaska sponsored the First International Reindeer/Caribou Symposium, a highly successful four-day meeting that was attended by more than 150 reindeer scientists and wildlife biologists representing all the circumpolar nations. This photograph shows Norwegian reindeer scientist, Dr. Sven Skjenneberg, telling Symposium participants about research activities at the Norwegian State Tame Reindeer Institute, Herstad, Norway.



UNIVERSITY OF ALASKA, FAIRBANKS
Fairbanks, Alaska 99701
INSTITUTE OF ARCTIC BIOLOGY

*Lynne: The purpose
letter is to see where
programs have met the
1978-79 budget -
J.R.L.*

November 6, 1979

Representative Brian Rogers
Room 710 F Gruening Building
University of Alaska
Fairbanks, AK 99701

Dear Representative Rogers:

I enclose copies of two programs for teaching and research that were proposed for the FY81 University of Alaska budget on behalf of the reindeer herders of Alaska. According to the Director of the Agricultural Experiment Station, Dr. James Drew, these program requests were deleted from the AES and SAIRM budget requests because they could not be accommodated within the 19% ceiling placed on the developmental budget.

I am also enclosing resolutions that were adopted by the Rural Area Development Council in Kotzebue (10/14/76) and in Nome (5/18/78) and by the Reindeer Herders Association in Nome (8/31/76). In addition, you should receive letters in support of these programs from: Mr. John Shaeffer, NANA Reindeer Corporation, the Nome Chamber of Commerce, the Reindeer Herders Association, the Reindeer Sul Committee of the Alaska Cooperative Land Managers Task Force (Mr. Ted Freeman, Chairman), the Sitsauk Native Village Corporation, the Nome Eskimo Community and the Alaska Federation of Natives.

As you are doubtlessly aware, much of this renewed interest in the reindeer industry stems directly from the rapidly developing velvet antler industry. For example, I estimate that this year the sale of velvet antler (a renewable agricultural resource!) probably grossed about 1.5 million dollars. Further, if this stimulus to increase herd sizes continues until the herds reach the carrying capacities of the ranges, the annual gross income on the Seward Peninsula alone, based on 1979 prices, will probably exceed 5 million dollars. Most important, when this occurs Alaska's reindeer industry will be producing a very significant amount of meat that is preferred by it's native peoples.

Continued...

UNIVERSITY OF ALASKA
INSTITUTE OF ARCTIC BIOLOGY

Rogers

-2-

November 6, 1979

The purpose of the enclosed programs is to provide the research needed by our producers in order to achieve their very realistic goals. Further, they will provide the teaching aids, curricula and training programs that are needed to develop a reindeer industry that is founded on modern livestock industry techniques.

Please advise if there is anything more I can do to assure that these programs get consideration by the legislature this year.

Respectfully,

JACK R. LUICK
Professor

JRL/dgh

enc.

cc: Rep. H. Pappy Moss
Rep. Pat Carney
Rep. Jack Fuller
Senator Frank Ferguson
Mr. Dan Karmun
Dean James Drew
Lynn Hale

6 COMPONENT INCREMENT

FY 81

ABBREV. TITLE

GR/AES - Applied Reindeer Research

COVER PROGRAM

UNIVERSITY OF ALASKA

EXPLAIN WHICH COVER PROGRAM OBJECTIVE IS AFFECTED, AND HOW.

The reindeer industry has requested research assistance on reindeer. This program would emphasize research to: (1) develop husbandry practices that will assist in a transition from meat to broader orientation toward by-product development; (2) develop disease control and animal management as it relates to changing herd practices and related organizational systems; (3) develop markets and reindeer products; (4) develop improved range management techniques; and (5) improve nutritional practices and management.

BRIEFLY DESCRIBE WHAT THIS INCREMENT PURCHASES IN TERMS OF MANPOWER AND OTHER RESOURCES.

Research Animal Scientist	\$ 53.9 K	
Range Scientist	47.2	
Research Veterinarian	15.0	
Staff Benefits @ 21.0%	24.4	
Animal Technician Grade 12	19.5	
Administrative Assistant Grade 12	19.5	
Clerical Assistant Grade 9 - 6 mos.	8.5	
Staff Benefits @ 24.1%	11.4	
Graduate Research Assistants (2)	16.0	
Travel	8.0	
Contractual Services	7.0	
Commodities	5.0	
Equipment (snowmachine, sled, 1/2-ton p.u.)	16.0	
	TOTAL	\$251.4 K

CODE	EXPENDITURE BY OBJECT	AMOUNT
100	PERSONAL SERVICES	21.0
200	TRAVEL	
300	CONTRACTUAL SERVICES	
400	COMMODITIES	
500	EQUIPMENT	16.0
600	LANDS, BLDGS, ETC.	
700	GRANTS, CLAWDS, ETC.	
800	MISCELLANEOUS	
	TOTAL	25.0

FEDERAL RECEIPTS	
GENERAL FUND MATCH	
GENERAL FUND	25.0
PROGRAM RECEIPTS	
STUDENT FEES	
FEDERATE COST RECOVERY	
OTHER RESTRICTED RECEIPTS	

POSITION COSTS		TEMPORARY	TOTAL MAN
No. PFT	No. PFT		
101	101	101	66

CHECK ONE:	INCREMENT CLASSIFICATION (circle one)
Continuation <input type="checkbox"/>	1 2 3 4
New Services <input checked="" type="checkbox"/>	

PRIORITIES				
Component	GRU	MAU	Cover Program	COVER PROGRAM
8	/	/	/	ACC
27	/	/	/	NEA

MAU UR/FAIRBANKS

GRU ORGANIZED RESEARCH

COMPONENT Agricultural Experiment Station

DATE REVISION 7/9/79

6 COMPONENT INCREMENT

13 PERSONAL SERVICES
REQUEST FOR NEW POSITION

FY 81

POSITION TITLE Professor of Animal Science		RANGE/STEP	DANG. UNIT	LOCATION	APPROV.	DISAPP.
					GOV.	
TYPE OF POSITION <input type="checkbox"/> FTE <input type="checkbox"/> PPT	MAN MONTHS 12	PRIORITY		FORM 12 PAGE/LINE	LEG.	

TYPE OF EXPENDITURE	1	2	3	AMOUNT
PERSONAL SERVICES:				
SALARY		53,900		
BENEFITS		11,300		
TRAVEL				
HEALTH INS.				
TOTAL PERSONAL SERVICES				65,200
TRAVEL				8,000
INDIRECT				7,000
SALARIES				9,000
STUDENT				16,000
OTHER				
TOTAL COST				101,200

JUSTIFICATION: The reindeer industry has requested research assistance on reindeer. This program would emphasize research to: (1) develop husbandry practices that will assist in a transition from meat to broader orientation toward by-product development; (2) develop disease control and animal management as it relates to changing herd practices and related organizational systems; (3) develop markets and reindeer products; (4) develop improved range management techniques; and (5) improve nutritional practices and management.

This position will provide leadership for a comprehensive Reindeer Research Program. This program also includes the following personnel:

- Range Scientist (12 months)
- Range Veterinarian (3 months)
- Animal Technician (12 months)
- Administrative Assistant (12 months)
- Clerical Assistant (6 months)
- 2 Graduate Research Assistants

CODE	FUNDING SOURCE	AMOUNT
	FEDERAL RECEIPTS	
	FEDERAL FUND MATCH	
	FEDERAL FUND	101,200
	UNIVERSITY RECEIPTS	
	STUDENT FEES	
	INDIRECT COST RECOVERY	
	OTHER RESTRICTED RECEIPTS	

ESTIMATION	
OTHER	101,200

FAIRBANKS ORGANIZED RESEARCH COMPONENT Agricultural Experiment Station DATE REVISED 7/9/79

13 PERSONAL SERVICES REQUEST FOR NEW POSITION

8/17

**13 PERSONAL SERVICES
REQUEST FOR NEW POSITION**

FY 81

1	POSITION TITLE Assistant Professor of Range Science			RANGE/STEP	BARG. UNIT	LOCATION	APPROV.	DIS.
2	TYPE OF POSITION <input type="checkbox"/> PPT <input type="checkbox"/> FPT	MAN MONTHS 12		PRIORITY		FORM 12 PAGE/LINE	GOV.	LEG.
3	TYPE OF EXPENDITURE			AMOUNT				
	1		2	3				
4	PERSONAL SERVICES:							
	SALARY		47,200					
5	Fringe Benefits		9,900					
6	FICA		XXXXXX					
7	HEALTH INS.		XXXXXX					
8	TOTAL PERSONAL SERVICES		57,100					
9	TRAVEL							
10	COMMODITIES							
11	EQUIPMENT							
12	OTHER							
13	TOTAL COST		57,100					
	CODE	FUNDING SOURCE						
14		PROPERTY RECEIPTS						
15		GENERAL FUND MATCH						
16		GENERAL FUND		57,100				
17		PROGRAM RECEIPTS						
18		STUDENT FEES						
19		INDIRECT COST RECOVERY						
20		OTHER RESTRICTED RECEIPTS						
21	CONTRIBUTION							
22	ADDITION		57,100					

JUSTIFICATION: The reindeer industry has requested research assistance on reindeer. This program would emphasize research to: (1) develop husbandry practices that will assist in a transition from meat to broader orientation toward by-product development; (2) develop disease control and animal management as it relates to changing herd practices and related organizational systems; (3) develop markets and reindeer products; (4) develop improved range management techniques; and (5) improve nutritional practice and management.

This position will provide research support for a program in Applied Reindeer Research.

YAC: JA/FAIRBANKS DIV: ORGANIZED RESEARCH COMPONENT: Agricultural Experiment Station DATE REVISED: 7/9/77

**13 PERSONAL SERVICES REQUEST
FOR NEW POSITION**

8/17

**13 PERSONAL SERVICES
REQUEST FOR NEW POSITION**

FY 81

1	POSITION TITLE Research Veterinarian		RANGE/STEP	BARG. UNIT	LOCATION	F.F. GOV.
2	TYPE OF POSITION: <input type="checkbox"/> PWT <input checked="" type="checkbox"/> PPT	MAX MONTHS 3		PRIORITY	FORM 12 PAGE/LINE	GOV. LEG.
3	TYPE OF EXPENDITURE		AMOUNT		<p>JUSTIFICATION: The reindeer industry has requested research assistance on reindeer. This program would emphasize research to: (1) develop husbandry practices that will assist in a transition from meat to broader orientation toward by-product development; (2) develop disease control and animal management as it relates to changing herd production and related organizational systems; (3) develop markets for reindeer products; (4) develop improved range management techniques; and (5) improve nutritional practices and management.</p> <p>This position provides technical support to a program in Applied Reindeer Research.</p>	
	1	2	3			
4	PERSONAL SERVICES:					
	SALARY		15,000			
5	BENEFITS		3,200			
6	FICA		 			
7	HEALTH INS		 			
8	TOTAL PERSONAL SERVICES		18,200			
9	TRAVEL					
10	CONTRACTUAL					
11	COMMODITIES					
12	EQUIPMENT					
13	OTHER					
14	TOTAL COST		18,200			
	CODE	FUNDING SOURCE				
15		FEDERAL RECEIPTS				
16		GENERAL FUND MATCH				
17		GENERAL FUND		18,200		
18		PROGRAM RECEIPTS				
19		STUDENT FEES				
20		INDIRECT COST RECOVERY				
21		OTHER RESTRICTED RECEIPTS				
21	CONTINUATION					
22	ADDITION:		18,200			

NAU UA/FAIRBANKS ORGANIZED RESEARCH COMPONENT Agricultural Experiment Station DATE REVISED 7/9/79

**13 PERSONAL SERVICES
REQUEST FOR NEW POSITION**

FY 81

1	POSITION TITLE Animal Technician		RANGE/S/LP	ORG. UNIT	LOCATION	CCV	
2	TYPE OF POSITION <input checked="" type="checkbox"/> PER <input type="checkbox"/> PPT	MAN MONTHS 12	PRIORITY		FORM 12 PAGE/LINE	LEG	
3	TYPE OF EXPENDITURE		AMOUNT		<p>JUSTIFICATION. The reindeer industry has requested research assistance on reindeer. This program would emphasize research to: (1) develop husbandry practices that will assist in a transition from meat to broader orientation toward by-product development; (2) develop disease control and animal management as it relates to changing herd practices and related organizational systems; (3) develop markets and reindeer products; (4) develop improved range management techniques; and (5) improve nutritional practice and management.</p> <p>This position provides technical support to a program in Applied Reindeer Research.</p>		
4	PERSONAL SERVICES: SALARY	19,500					
5	BENEFITS	4,700					
6	FICA						
7	HEALTH INS						
8	TOTAL PERSONAL SERVICES	24,200					
9	TRAVEL						
10	CONTRACTUAL						
11	COMMODITIES						
12	EQUIPMENT						
13	OTHER						
14	TOTAL COST	24,200					
15	CODE	FUNDING SOURCE					
16		FEDERAL RECEIPTS					
17		GENERAL FUND INCH					
18		GENERAL FUND	24,200				
19		PROGRAM RECEIPTS					
20		STUDENT FEES					
21		INDIRECT COST RECOVERY					
21		OTHER RESTRICTED RECEIPTS					
21	CONTRIBUTION						
22	ADDITION	24,200					

NAU UA/FAIRBANKS BRU ORGANIZED RESEARCH COMPONENT Agricultural Experiment Station DATE REVISED 7/9/77

**13 PERSONAL SERVICES
REQUEST FOR NEW POSITION**

FY 81

1	POSITION TITLE Administrative Assistant			RANGE/STEP	BARG. UNIT	LOCATION	AGENCY	
2	TYPE OF POSITION <input checked="" type="checkbox"/> PFT <input type="checkbox"/> PPT	MAX MONTHS 12		PRIORITY		FORM 12 PAGE/LINE	LEG.	
3	TYPE OF EXPENDITURE			AMOUNT				
	1	2	3					
4	PERSONAL SERVICES:							
	4	10,500						
	5	6,700						
	6	X X X X X X X X X X						
	7	X X X X X X X X X X						
	8	TOTAL PERSONAL SERVICES			24,200			
9	TRAVEL							
10	CONTRACTUAL							
11	GRANT REVENUE							
12	EQUIPMENT							
13	OTHER							
14	TOTAL COST			24,200				
	CODE	FUNDING SOURCE						
15		FEDERAL RECEIPTS						
16		GENERAL FUND MATCH						
17		GENERAL FUND		24,200				
18		REGULATORY RECEIPTS						
19		STUDENT FEES						
20		INDIRECT COST RECOVERY						
21		OTHER RESTRICTED RECEIPTS						
22	CONTRIBUTION							
23	ADDITION	24,200						

JUSTIFICATION: The reindeer industry has requested research assistance on reindeer. This program would emphasize research to: (1) develop husbandry practices that will assist in a transition from meat to broader orientation toward by-product development; (2) develop disease control and animal management as it relates to changing herd practices and related organizational systems; (3) develop markets and reindeer products; (4) develop improved range management techniques; and (5) improve nutritional practices and management.

This provision provides administrative support to a project in Applied Reindeer Science.

NAU UA/FAIRBANKS PRU, ORGANIZED RESEARCH COMPONENT Agricultural Experiment Station DATE REVISID 7/9/79

**13 PERSONAL SERVICES REQUEST
FOR NEW POSITION**

8/17

6 COMPONENT INCREMENT

FY 81

ABBREV. TITLE
JAAARM Applied Reindeer Research - Teaching Program

COVER PROGRAM
 UNIVERSITY OF ALASKA

CODE	EXPENDITURES BY OBJECT	AMOUNT
100	PERSONAL SERVICES	15,763
200	TRAVEL	4,000
300	CONTRACTUAL SERVICES	12,000
400	COMMODITIES	4,000
500	EQUIPMENT	
600	LANDS, BLDGS., ETC.	
700	GRANTS, CLAIMS, ETC.	
800	MISCELLANEOUS	
TOTAL		35,763

EXPLAIN WHICH COVER PROGRAM OBJECTIVE IS AFFECTED, AND HOW.
 The University of Alaska by Alaska statutes has the responsibility for research, extension and education for the development of agriculture and Alaska's natural resources. This increment addresses the education portion of a program to develop the reindeer industry in Alaska and will support:

1. The training of Extension personnel and field based teachers as well as the support of back-up specialists for specific problems and concerns of the reindeer industry.
2. The development of curriculum and workshops and support for instructor fees and travel costs for planning and organization of the program.
3. The development of educational materials and teaching aids for items such as horn cutting, animal first aid, range plants, castration, and disease recognition and control

FEDERAL RECEIPTS	
GENERAL FUND MATCH	
GENERAL FUND	
PROGRAM RECEIPTS	
STUDENT FEES	
INDIRECT COST RECOVERY	
OTHER RESTRICTED RECEIPTS	

BRIEFLY DESCRIBE WHAT THIS INCREMENT PURCHASES IN TERMS OF MANPOWER AND OTHER RESOURCES.

Personal Services - 6 man months of professional salary

Travel - \$ 4,000 to organize, develop and deliver educational services

Contractual Services - \$12,000 for air charters, back-up specialists, duplication of teaching materials, postage, and phone rental

Commodities - \$ 4,000 Supplies for teaching and office support of the educational program.

POSITION COUNT		TEMPORARY	TOTAL NO. MAN MOS.
No. PPT	No. PPT		
001	001 6	000	6

CHECK ONE:

Continuation

New Services

INCREMENT CLASS CODE (select one)

1	2	3	4	5
---	---	---	---	---

PRIORITIES				
Component	UNU	FAU	Cover Program	GOVERNOR
5 5	5 5	 	 	ACCEPT
				REJECT

DATE REVISIO _____ COMPONENT Academic/SALRN/IPS DATE REVISIO _____

5 COMPONENT INCREMENT

**13 PERSONAL SERVICES
REQUEST FOR NEW POSITION**

FY 81

1	POSITION TITLE Applied Reindeer Research - Teaching Program		RANGE/STEP	DEPT. UNIT	LOCATION Fbks.	APPROV. DIS.
2	TYPE OF POSITION <input type="checkbox"/> PFT <input checked="" type="checkbox"/> EX PFT	MAX MONTHS 6	PRIORITY 5/5	FORM 12 PAGE/LINE		GOV. LEG.
3	TYPE OF EXPENDITURE		AMOUNT			
4	PERSONAL SERVICES:					
5	SALARY					
6	BENEFITS					
7	FICA		X			
8	HEALTH INS.		X			
9	TOTAL PERSONAL SERVICES		15,763			
10	TRAVEL		1,000			
11	CONTRACTUAL		12,000			
12	COMMODITIES		4,000			
13	EQUIPMENT					
14	OTHER					
15	TOTAL COST		35,763			
16	CODE	FUNDING SOURCE				
17		FEDERAL RECEIPTS				
18		GENERAL FUND MATCH				
19		GENERAL FUND				
20		PROGRAM RECEIPTS				
21		STUDENT FEES				
22		INDIRECT COST RECOVERY				
23		OTHER RESTRICTED RECEIPTS				
24	CONTINUATION					
25	ADDITION	X				

JUSTIFICATION:

The University of Alaska by Alaska statutes has the responsibility for research, extension and education for the development of agriculture and Alaska's natural resources. This increment addresses the education portion of an effort to develop the reindeer industry in Alaska.

This increment is to provide the following support:

1. develop and train teaching aides and materials;
2. support training for the Extension personnel and field based teachers;
3. provide for back-up specialist assistance as necessary for specific industry problems; and,
4. provide leadership in developing a general curriculum.

MAU _____ DRU _____ COMPONENT Academics/SALRM/IPS DATE REVISIO _____

**13 PERSONAL SERVICES REQUEST
FOR NEW POSITION**

Resolution No. 3

regarding

DEVELOPMENT OF A REINDEER INDUSTRY

WHEREAS, there is and will continue to be a severe shortage of meat available from within the Northwest and northern Alaska regions due to restrictions on caribou harvest, and

WHEREAS, NANA Regional Corporation has undertaken to establish a reindeer herd which will be able to provide a relatively cheap and reliable source of meat in Northwest Alaska, and

WHEREAS, NANA Regional Corporation desires to manage this herd on a basis of maximum sustainable yield consistent with maintenance of the range, and

WHEREAS, NANA Regional Corporation intends to increase the herd as rapidly as possible consistent with maintenance of the range,

NOW, THEREFORE, BE IT RESOLVED that the Alaska Rural Development Council endorses the attempts of NANA to develop the reindeer industry in Northwest Alaska, and

BE IT FURTHER RESOLVED that federal and state agencies are encouraged to continue and increase their technical educational and financial support for the reindeer industry, including establishment of a reindeer research facility in northwest Alaska, and

BE IT FURTHER RESOLVED that said agencies be encouraged to assist NANA Regional Corporation in establishing programs of cooperation with the Soviet Union and North European nations to exchange technology, train personnel, increase herds by importation of breeding stock, and ship meat directly to Alaska if feasible, and

BE IT FURTHER RESOLVED that the members of this Council will endeavor to assist NANA and other herd owners to efficiently manage and increase the herds so as to meet the food needs of the people of the Alaska.

ALASKA RURAL DEVELOPMENT COUNCIL - May 17-18, 1978

Nome, Alaska

Resolution Regarding Research and Education on Reindeer

WHEREAS, University of Alaska personnel, such as Dr. Jack Luick, of the Institute of Arctic Biology, have spent years developing research data and collecting information beneficial to the changing conditions of the reindeer industry with very limited financial support, and

WHEREAS, Continued support of this work is very uncertain, and

WHEREAS, Changing conditions such as the sale of reindeer antlers and possible changes in land ownership require a continual evaluation of reindeer management needs, and

WHEREAS, Data for making these management decisions requires considerable research and education capabilities now,

HEREBY BE IT RESOLVED that the Alaska Rural Development Council at its May 17th and 18th Nome meeting, urges the Alaska State Legislature to support, through the University of Alaska, an expanded program of applied reindeer research and education, and

BE IT FURTHER RESOLVED that this resolution be sent to the following:

Governor of Alaska
President of the Alaska Senate
Speaker of the House
President, University of Alaska
President, Board of Regents, University of Alaska

HB

590

(9)

COMMITTEE REPORT

HOUSE

1/22/30

FURTHER:

Date: _____

Mr. Speaker:

The Committee on RESOURCES has had HB 590

"An Act relating to the removal of herring from the state."

under consideration and (a majority of the committee) (the committee) reports it back with the following recommendations:

- do pass do not pass
- do pass with attached amendments(s)
- replace with CS for _____ same title
 new title
- and recommends _____
- AND attaches a "Letter of Intent" New Fiscal Note
- reports it back without recommendation
- referred to the _____ Committee

MEMBERS SIGNING
DO PASS

MEMBERS HAVING
OTHER RECOMMENDATIONS:

CHAIRMAN

AGO 125392

what?

8

Hearing 1/31/80 — Tabled

Hearing 2/12/80

Hearing 2/25/80 - Reported out at CS
(second CS - see
correct version stapled to
this folder)



Alaska State Legislature

House

HOUSE RESOURCES COMMITTEE

FISH & GAME ISSUES

Alvin Osterback, Chairman

Pouch V, State Ca
Juneau, Alaska 9
(907) 465-3715

HEARING NOTIFICATIONS

BILL	DATE INFORMED	LETTER/PHONE	INFORMED	H
HB590	1/24	586-6336	Rick Lauber, Pacific Seafood Processors Assoc.	1
	1/24	3720	Rep. Gardiner, Sponsor	1
	1/25	586-2820	United Fishermen of Alaska Sharon Macklin, Exec. Dir. to testify	1/
	1/25	283-7000	Salamantof Seafood (Kenai) Tom Waterer, Pres. to testify	1/
	1/25	772-4294 and 206-282-0988	Icicle Seafoods	1/
	1/25	4100	Dept. of Fish & Game	1/
	1/25	2020	Dept. of Commerce Div. of Economic Enterprise Dir. Dick Eatins	1/
	2/1	4100	Dept. of Fish & Game	2
	2/1	3720	Rep. Gardiner	2
			Rep. Gardiner, Fish & Game	2

STATE OF ALASKA
THE LEGISLATURE

LEGISLATIVE AFFAIRS AGENCY

POUCHY STATE CAPITOL
JUNEAU ALASKA 99801
207 241 1100

MEMORANDUM

February 21, 1980

SUBJECT: Herring (CSHB 590)

TO: Representative Terry Gardiner
Attn: Sharon Stoops, A.A.

FROM: Kenneth E. Vassar
Legislative Counsel *KV*

Enclosed is the committee substitute you requested for House Bill 590. Section 1 of the bill amends AS 16.10.172 by providing that stripping of herring, while generally wasteful and to be discouraged, is acceptable in some parts of the state because of the lack of local industries and abundance of herring in those parts of the state. Section 1 further declares that the areas described in AS 16.10.173(f) (added by Section 2 of the bill) are such areas where herring stripping is acceptable.

The guidelines established in the amendments to AS 16.10.172 in Section 1 of the bill are not exactly the same as those in Greg Cook's memo which you provided with your request. Greg had suggested that biological, social and economic factors combine in certain areas of the state to make stripping acceptable. I have some concerns about the local or special legislation questions this bill raises (which I will discuss later in this memo), and one of those questions relates to the fair and substantial relationship between the classification created in Section 2 of the bill - setting apart certain areas of the state for special treatment - and a matter of statewide concern. A legislative finding that biological, social and economic factors in certain areas of the state justify special treatment for those areas seems vague and not likely to assist a court in determining how the classification fairly and substantially relates to a problem you are seeking to resolve. Therefore, I talked with Greg to see if some more specific guidelines could be devised. The result is the two-pronged approach incorporated in Section 1 relying on (1) the lack of a local industry and (2) an abundance of herring.

The more specific guidelines will go far toward establishing the fair and substantial relationship between the classification and the problem to be solved; however, it does not end the inquiry. Article II, sec. 19, Constitution of the State of Alaska provides in part:

"The legislature shall pass no local or special act if a general act can be made applicable."

Essentially, an act challenged as local or special is analyzed in the same manner as an act challenged as violative of equal protection. Abrams v. State, 534 P.2d 91 (1975); State v. Lewis, 559 P.2d 630 (1977). However, there is one significant difference between the two analyses. Under equal protection analysis, the act must fairly and substantially relate to a legitimate state interest or concern. Under local or special legislation analysis, the interest or concern is, at least in part, determined to be "legitimate" only if it is statewide in nature. That is, even though the act may treat certain areas of the state or certain groups of people differently from other areas or groups, it is not local or special if it fairly and substantially relates to a matter of statewide concern or interest. Thus, in Abrams, the court found the incorporation of the Eagle River-Chugiak Borough to be a matter which is not of statewide interest or concern and found the legislation authorizing the formation of that borough to be local legislation. On the other hand, in Lewis, the court found the capital move to be a matter of statewide concern, and legislation which fairly and substantially related to the capital move was not found to be local or special.

The question in this bill, then, is whether stripping of herring is a matter of statewide concern. Presumably, the argument in favor of the bill would be to the effect that the distinct and unique circumstances in this area of the state justify treating it differently from others. However, a similar type of argument was made to justify the incorporation of Eagle River-Chugiak as a borough. The court stated:

"We do not find this justification persuasive. Numerous other localities within organized boroughs can also claim to be unique in certain respects." 534 P.2d at 95.

Representative Terry Gardiner
Page 3
February 21, 1980

I think stripping of herring is probably not a matter of statewide concern; therefore, I would anticipate that this bill would be considered local legislation. Even though an act is found to be local legislation, it is nevertheless permissible if no general act can be made applicable. However, I think a general act can be made applicable in this case. Using the same or similar guidelines established in Section 1 of the bill, the Board of Fisheries could be instructed to discover the areas of the state where those circumstances exist and to allow stripping in those areas by regulation.

Finally, if stripping of herring is found to be of statewide interest, the fair and substantial relationship between the classification and the interest rests upon the guidelines established in Section 1 of the bill. One of those guidelines is a finding that herring exists in abundance in the area. Aside from the policy considerations, it seems that linking such a finding to an area of the state by a legislative enactment is risky business. These kinds of circumstances change from time to time. How quickly they are likely to change, I do not know. However, it is possible that, by making this finding, the legislation may fairly and substantially relate to the area at the time the legislation is enacted while losing, either gradually or suddenly depending upon the state of the herring population, its fair and substantial relationship over time. This would require the legislature to either act as a board of fisheries to keep track of the herring population and make amendments to the law as needed or to allow the law to lose its fair and substantial relationship to the area over time. If the former occurs, it would seem that the legislature will have stepped over into an executive function; if the latter occurs, new questions of equal protection would arise.

KEV:ljb

Enclosure

(HB590) - Question of Constitutionality of prohibiting the taking of herring out of state before processing.

According to both Ken Vassar (legislative lawyer) and Greg Cook (Fish & Game) this is probably unconstitutional

→ 1930's supreme court case about shrimp in North Carolina or Louisiana - Same situation except that a "shrimp war" was going on. Court ruled it was illegal to require processing in one state.

→ This bill would interfere with federal inter-state commerce laws & regs.

Alaska Administrative Code - Register 70, July 1979
AAC 39.198 states that foreigners (not legally admitted to U.S.) cannot take ~~fish~~ ^{herring} from Alaska before it has been processed

Also is state statute regarding live King Crab
AS 16.10.240 says no live crab can be shipped or sent out of Alaska. But, it says that crab may be shipped live via air freight after pre-packaging.

(See also 16.05.685 (1) - Unlawful to process crab on a commercial crab fishing vessel unless vessel remains within one registration area from time crab is caught to time of dock delivery).

AS 16.10.172 concerns utilization of herring (may not harvest ice & waste the rest)

~~AS 16.10.161~~
AS 16.05.920 prohibits any making, transporting, selling or furnishing of fish (not legally admitted to U.S.)

Carl Rosier noted these statutes and says that other than these Alaska has no primary processing laws

Balamatof Seafoods, Inc.



P. O. Drawer 4220

Kenai, Alaska 99611

Phone: (907) 283-7000

February 22, 1980

Chairman Alvin Osterback
House Resource Committee
Alaska State House of Representatives
Pouch V
Juneau, Alaska 99811

Dear Chairman:

This letter is for the purpose of conveying my appreciation for the opportunity to appear before your Committee on the matter of HB 590. It is also for the purpose of relating my impression of testimony made during that meeting of February 21, 1980.

Before addressing the issue specifically, I must extend to you my apology for any impression you may have had that my testimony was more aggressive than necessary. I feel, however, that the matter of HB 590 is of extreme importance economically to the State and industry, and further, I am not used to being put in a position of when once recognized by the Chair of having to defend myself against somewhat pointed arguments from the floor, regardless of their legitimacy.

As President of an Alaskan corporation which has rightfully earned a ranking position in the industry, I must stick to my testimony that regardless of all else, the portion of the Bill titled, Section 16.10.175 Removal of Herring From The State, must pass. Amendments should clarify, however, as follows:

1. Icing should not be qualified as a processing technique;
2. Salting should only be allowed in the case of food herring with roe content under 5%, and in such case should be packaged as food in cartons containing less than 200 lbs. This will additionally allow easier enforcement of the 5% rule.

It is my sincere belief that given the proper economic incentive the industry can indeed handle the upcoming harvest to a processed state within the State's jurisdiction. If there is any question regarding frozen capacity, when coupled with stripping capacity, there is little doubt that the industry can process the 1980 Berring Sea catch within the State's jurisdiction.

Opponents of this bill show little care about the economics of the consideration or the impact to the State and existing State processors. They rather are arguing towards self-serving goals with the

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defense that "no one can prove to us that the product can be handled and, therefore, we who are serving foreign interests or non-resident fishermen must be recognized in our right to the product. Further, we say that salted Bering Sea herring tendered to in-State processors is not economically feasible and, therefore, will not be accomplished".

To the first argument I say that before it happened, no one could have conceived such a massive and effectual air lift of Bristol Bay sockeyes in 1979, nor could anyone guarantee that such a massive flotilla of floating processors could have frozen so much salmon in the NakNek-Kvichak areas.

Additionally, it was inconceivable until this past season that a majority of 1979 Bristol Bay sockeyes would be frozen rather than canned. The quality and spoilage considerations for salmon are much greater than for herring. Regardless, the industry successfully processed to the frozen state much more Bristol Bay salmon in 1979 than is necessary to completely process by all means the 1980 Togiak herring catches.

It follows that whenever economic incentive exists, industry can and will develop accordingly sufficient processing capacity. In the case of herring processing, it will only require employment of existing capacities. It is up to the State to set the guidelines now in February of 1980 towards the goal of how the State wishes to develop its valuable herring resource. Arguments at this date will only be reinforced by the supposition that processing goals can not be met.

If this Bill is effective in the future, however, it will then be the case that arguments are reinforced by claims of economic displacement, jeopardy of established business, and a multitude of other arguments as to why the State should not require in-State processing. Referring to the "illogical" argument that Togiak herring can not be successfully tendered or air lifted to other processing areas of the State, either fresh or salted, it should be considered that, that is exactly what is being done now by foreign interests over much greater distances; and, yet, salted or lightly salted herring are transported as distant as Korea, Vancouver, or Seattle destinations for processing.

It should be quite apparent that in-State tendering would be easier than out of State tendering since the product would not be moved as far, it is probably more economically feasible. It certainly is of much, much greater importance by way of economic return to the State.

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The last item I wish to emphasize is that if there is any question about the capacity to process the 1980 herring harvest to the frozen state, those questions are of a lesser magnitude than what will happen to the State's processors without some protection. However, if the ultimate goal is to give the maximum guarantee towards maximum processing capacity in the State, then questions will be removed if stripping of herring is allowed and carcasses allowed to be discarded in all processing areas beyond a 50-mile radius of a fish meal rendering plant.

The discharge of unused carcasses is not really an economic waste, nor is it a biological waste, it is only an aesthetic problem.

Herring are by number the most prodigious fish species in the world. We are harvesting roe herring (greater than 5%) strictly for the roe which is of much higher economic value than the entire carcass. Even then, our harvests are strictly monitored. If a two-year adjustment period is granted to the industry towards full utilization of the herring carcass by product of the vast Bering Sea harvest, then any further question can be removed about processing capacity. This is true only, however, if the privilege is extended to processing areas outside of the Togiak district where a large number of large-capacity shore facilities exist.

In the case of our company's situation, we operate an approximate 30,000 sq. ft. plant on the Kenai River; we have large freezing and stripping capacities, and are preparing both production lines. We wish to freeze as much herring as is possible, however, any carcasses which are unusable, we would propose to run through our plant's offal grinding system, which would be discharged in deep water as is permitted to us by State and EPA authorities for salmon and related wastes.

The final point I would like to stress to you, Mr. Chairman, is that you must consider very carefully not only the testimony you are hearing on HB 590, but you must also consider very seriously who is giving the testimony, what is their purpose, and is the purpose consistent with the best possible goals of the State. I believe seriously "that you and the Resource Committee are charged with the obligation to effect for the State and its residents the absolute maximum in-State benefit wherever possible; very little else should be considered".

As one significant resident employer, I would like to offer the suggestion, as President, that our company's interests are the same as those best suited to meet that goal. We wish to continue our business totally in State. We ask only for the benefit that we will have fair access to our State's resources, and to a much favored status in comparison to foreign or non-resident processing interests. If the State and its Resource Committee does not do its utmost to help in-State processors now when in-State processors desperately need the help,

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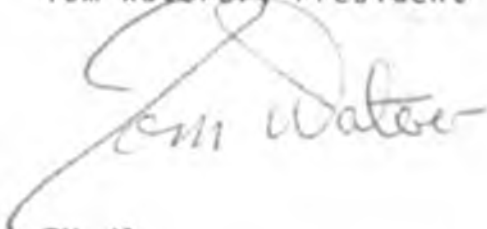
then I would suggest that ultimately there would be none left;
and if the industry suffers further setbacks, you will be left
with nothing but foreign processing ships and probably very spor-
adic markets for the State's resident fishermen.

Mr. Chairman and honorable Committee members, I hope you will con-
sider seriously the balances and impact of your decision.

Sincerely,

SALAMATOF SEAFOODS, INC.

Tom Waterer, President



TW:dle

cc: House Resource Committee Members: Patrick J. Carney
C. V. Chatterton
Samuel R. Cotten
Richard I. Eliason
John G. Fuller
Richard W. Halford
Bill Miles
Fred S. Zharoff

House of Representatives Speaker, Terry Gardiner

Encs: Testimony Outline - House Resource Committee
Revised HB 590 (with alterations)
February 18, 1980 letter to City of Kenai
Kenai Peninsula Borough letters of endorsement (6)

I. INTRODUCTION

A. Company - 100% Alaskan owned; incorporated in the State in 1973:

Size, volume, position in industry, particularly in herring, employment, 1979 raw fish tax discussions.

B. Personal -

Time in industry, 18 years fisherman - processor.
Formal education in Biological Sciences.

II. ORIENTATION

Alaska should review its entire philosophies regarding management of its fishing industry. In light of the fact that its 1979 ex-vessel values alone were on the order of 700 Million Dollars, this thought should surely bear some consideration.

However, true impact of fisheries is fact that in addition to this 700 Million is added substantial payrolls of the state's processors and the notable multiplier effect this has on Alaskan economy, especially in light of the fact that generally these are imported - dollars injected directly into the private sector.

Noting that the socio-economic impact is so great it stands that some consideration be given to how best to manage the economics of a fishing as to the best benefit of Alaska and its citizens.

In my opinion HB 590 is one of first examples of such legislation.

The unfortunate reality - usually fisheries are managed only on premise that when a biological surplus exists it should be harvested by whatever means available w/o due consideration of the particular socio economics involved. This, of course, is as much a fallacy as is conservation for the sake of conservation. I say, what purpose is there for Alaska to allow harvest if there is not maximum benefit to the State and its citizens to do such? It is time that biological management be coupled with economic management and by economic management I mean maximizing economic benefit to State, its resident fishermen, its processors.

DEFINE
PROCESSING
IN CASE
OF HERRING

I strongly advocate Alaska proceed stepwise toward maximizing value added within the State. Since processing in the fishing industry is very labor intensive, Alaska can only benefit by such direction. Benefit to labor, transport, taxes, etc.

In the case of HB 590, we strongly support it and suggest that since Alaska herring industry is just now experiencing a rapid growth, now is the time to set the guidelines by which to create the most value to the State via in-State processing, and at the same time insure the quality reputation.

Without protection of bills such as HB 590, in-State processing will not only not develop, but will likely decline once the alternate modes of handling are developed. This is especially true for herring, since roe in fish can be easily preserved in unprocessed state long enough to allow cheap bulk transport to outside and generally foreign processing facilities where plants already exist, and labor is tremendously cheaper.

What's at stake -- herring -- a probably 1980 1st whole value to processors at up to 100 Million Dollars, depending upon actual volume harvested, quality and current market development. If fully realized, and if properly regulated, the large bulk of those dollars can enter the economy; and being new dollars to the State, would be magnified greatly in impact due to the related multiplier of the particular economies.

What is the worst case if HB 590 doesn't pass?

- *Multitude of Canadian processing plants waiting idle, even greater Japanese trampers carrying lightly salted fish to Korea and Japan. These are being prepared now.

- *1979 Togiak example

 - Trampers, 300-400 ft. tanker barges

- *Once proven, these could transport from SE, CI, PWS, anywhere.

Since out-of-state operators have a greater tendency to attract non-resident fishermen and since this is a developing non-limited fishery, there are a multitude of fishermen from Bellingham, Seattle, Astoria, San Francisco, and S _____ wishing to join these operations.

In a worse case analysis, an out-of-state fisherman, tenderman, barge, or trampler operator, travel to Bristol Bay to harvest and transport the fish out. In 1979 the Bristol Bay case was about \$600/ton. Alaska gets 3% or \$18 return.

Extending the worst case to 40-50,000 State-wide harvest, Alaska gets \$720,000-\$900,000 in raw fish tax--nothing else.

Obviously this won't result, for all herring close to 50% value is likely lost.

We are required to capitalize in Alaska labor, identify each carton by packer origin, and our Alaska health number, where is this, and Alaska quality control, in tanker operations hauling product to Canada or Korea?