

Quarterly Report

Contract #03-5-022-53

Research Unit #230

Reporting Period: 1 April - 30 June 1978

Number of Pages: 3

The Natural History and Ecology of the Bearded Seal
(Erignathus barbatus) and the Ringed Seal (Phoca hispida)

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30 June 1978

I. Task Objectives

1. Summarization and evaluation of existing literature and available unpublished data on reproduction, distribution, abundance, food habits, and human dependence on bearded and ringed seals in the Bering, Chukchi, and Beaufort Seas.
2. Acquisition of large amounts of specimen material required for an understanding of productivity, growth rates, and mortality in these two species.
3. Acquisition of baseline data on mortality (including parasitology, diseases, predation, and human harvest) of ringed and bearded seals.
4. Determination of population structure of bearded and ringed seals as indicated by composition of harvest taken by Eskimo subsistence hunters.
5. Initial assessment of regional differences in density and distribution of ringed and bearded seals in relation to geographic areas and, to a lesser extent, in relation to major habitat condition.
6. Acquisition of additional information on seasonal migrations.

II. Field and Laboratory Activities

Effort this quarter was devoted primarily to field collection of specimen material. Village collections were made at Nome, Diomede, Gambell, Savoonga, Point Hope, Shishmaref, and Wales. In addition, a collection effort was made in Nome in April with the aid of a NOAA UH1H helicopter. Project personnel participated in a northern Bering Sea ice remnant cruise aboard the NOAA ship SURVEYOR in May and June.

Data management continued on an intermittent basis. Data check programs became available from Michael Crane, AEIDC, Anchorage and were used to check, correct, and resubmit data. Negotiations continued for the purchase of a data microprocessor to facilitate data input and analysis.

Table 1 provides a complete listing of field and laboratory activities during the past quarter. Dates and personnel are included.

Table 1. Field and laboratory activities, 1 April - 30 June 1978.

Activity	Dates	Personnel
Specimen Collections:		
Nome	10-13 April	T. Eley, L. Lowry
Point Hope	9 April - 16 May	G. Seaman
Gambell	May, June	ADF&G personnel
Savoonga	May, June	ADF&G personnel
Diomedede	May, June	ADF&G personnel
Nome	May, June	ADF&G personnel
Wales	May, June	D. Strickland
Shishmaref	8-24 June	R. Tremaine
Bering Sea ice remnant (SURVEYOR)	1 May - 15 June	K. Frost, J. Burns, L. Lowry
Ringed seal survey - Beaufort Sea	5-9 June	J. Burns, D. James
Preparation of FY 79 proposal	June	J. Burns
Preparation of quarterly report	27-28 June	K. Frost
Data management	intermittent	K. Frost, R. Lynn
Laboratory processing of specimen material	intermittent	J. Burns, T. Eley, R. Lynn, D. Strickland
Negotiations for purchase of microprocessor	intermittent	K. Frost, L. Lowry, J. Burns

Methods

For a discussion of methods, refer to RU #230 Annual Report, 1 April 1978.

Whenever feasible, usable meat from seals collected by ADF&G personnel for this research was given to residents of coastal communities.

Data Collected

Table 2 summarizes the results of our collection effort from 1 April to 30 June 1978.

Table 2. Seal specimens obtained during the period 1 April - 30 June 1978.

Location	<u>Phoca (Pusa) hispida</u>	<u>Erignathus barbatus</u>
Point Hope	21	1
Shishmaref	113	27
SURVEYOR	6	13
Nome	27 - samples have not been recovered from the field	
Gambell	80-90 - samples have not been recovered from the field	
Savoonga	70-80 - samples have not been recovered from the field	
Diomede	50-60 - samples have not been recovered from the field	
Wales	70-80 - samples have not been recovered from the field	

III. and IV. Results and Preliminary Interpretation

A detailed presentation and discussion of results was provided in our 1978 annual report. Further results and discussion of data will be presented upon completion of additional laboratory work and data analysis.

V. Problems Encountered/Recommended Changes

None.

VI. Estimate of Funds Expended

As of 31 May we have expended the following amounts during FY 78:

Salaries and benefits	\$ 65,700
Travel and per diem	10,200
Contractual services	5,400
Commodities	3,400
Equipment	200
Total Expenditures	\$ 84,900