

Arctic Development

NATIVE HARVEST OF WILDLIFE IN THE KEEWATIN REGION, NORTHWEST TERRITORIES

NWT WILDLIFE HAVESTING

Wildlife Products

Statistics/Surveys

1984

CANADA - FISHERIES AND OCEANS

5-2-40

NATIVE HARVEST OF WILDLIFE IN THE
KEEWATIN REGION, NORTHWEST
TERRITORIES

Sector: Wildlife Products

5-2-40

Statistics/Surveys

Government Library

AUG 17 1987

Government of N.W.T.
Yellowknife, N.W.T.

Native Harvest of Wildlife in the Keewatin Region, Northwest Territories for the Period October 1983 to September 1984

R.L. Gamble

Central and Arctic Region
Department of Fisheries and Oceans
Winnipeg, Manitoba R3T 2N6

May 1987

Canadian Technical Report of Fisheries and Aquatic Sciences No. 1543

Fisheries and Oceans / Pêches et Océans

Canada

100
12
355
1984

Canadian Technical Report of
Fisheries and Aquatic Sciences 1543

May 1987

NATIVE HARVEST OF WILDLIFE
IN THE KEEWATIN REGION, NORTHWEST TERRITORIES
FOR THE PERIOD OCTOBER 1983 TO SEPTEMBER 1984

by

R. I. Gamble¹

Central and Arctic Region
Department of Fisheries and Oceans
Winnipeg, Manitoba R3T 2N6

This is the 8th Technical Report
from the Central and Arctic Region, Winnipeg

¹ Present address 20 Amundsen Ray, Winnipeg, MB R3K 0V2.

Former address Keewatin Wildlife Federation, Rankin Inlet, NT X0C 0G0

PREFACE

This report is presented in fulfillment of Department of Supply and Services Contract OSS 25 **S.T.A.** 7138-04-0001 let to the Keewatin Wildlife Federation to conduct a wildlife harvest study in the Keewatin Region - Phase II. The work was done on behalf of the Federal Government departments of Environment Canada (Canadian Wildlife Service), Fisheries and Oceans (Western Region), and Indian Affairs and Northern Development; the Government of the Northwest Territories Department of Renewable Resources; and the **Keewatin Wildlife Federation**.

The report is accepted upon recommendation by the steering committee for the study made up of representatives of the agencies noted above (Appendix 1) and chaired by Mr. F. McFarland of the **Department** of Indian Affairs and Northern Development. The harvest study material is published under the auspices of the **DFO** technical report series by agreement of the steering committee in order to ensure that the data achieve a wide circulation, be accessible to the interested public, and be published in a standardized format generally **recognized** as appropriate for **the** dissemination of such information.

A report of the study in **Inuktitut** will also be published as an insert to the periodical Caribou News (Contact Caribou News c/o Nortext Information Design Ltd., Suite 200, 16 Concourse Gate, Nepean, Ontario, K2E 7S8).

© Minister of Supply and Services Canada 1987

Cat. no. Fs 97-6/1543E

ISSN 0706-6457

Correct citation for this publication is:

Gamble, R.L. 1987. Native harvest of wildlife in the Keewatin Region, Northwest Territories for the period October 1983 to September 1984. Can. Tech. Rep. Fish. Aquat. Sci. 1543: v + 82 p.

TABLE OF CONTENTS

	<u>Page</u>
ABSTRACT/RÉSUMÉ	v
INTRODUCTION	1
MATERIALS AND METHODS	1
General	1
Human resources	1
Materials	1
Data collection and analysis	2
Data processing	2
RESULTS	3
DISCUSSION	4
Collection effort	4
Lost data and fieldworker turnover	5
More informed hunter public	5
Translation difficulties	5
Information flow	6
Hunter lists and age categories	6
Analytical procedures	6
CONCLUSIONS	6
ACKNOWLEDGMENTS	7
REFERENCES	7

LIST OF TABLES

Table	<u>Page</u>
1 The reported harvest by Baker Lake hunters, expressed as numbers of animals, for the period October 1983 to September 1984	9
2 The reported harvest by Chesterfield Inlet hunters, expressed as numbers of animals, for the period October 1983 to September 1984	10
3 The reported harvest by Coral Harbour hunters, expressed as numbers of animals, for the period October 1983 to September 1984	11
4 The reported harvest by Eskimo Point hunters, expressed as numbers of animals, for the period October 1983 to September 1984	12
5 The reported harvest by Rankin Inlet hunters, expressed as numbers of animals, for the period October 1983 to September 1984	13
5 The reported harvest by Repulse Bay hunters, expressed as numbers of animals, for the period October 1983 to September 1984	4
7 The reported harvest by Whale Cove hunters, expressed as numbers of animals, for the period November 1983 to September 1984	5

Table	<u>Page</u>
8 The estimated harvest by Baker Lake hunters, expressed as numbers of animals, for the period October 1983 to September 1984	16
9 The estimated harvest by Chesterfield Inlet hunters, expressed as numbers of animals, for the period October 1983 to September 1984	17
10 The estimated harvest by Coral Harbour hunters, expressed as numbers of animals, for the period October 1983 to September 1984	18
11 The estimated harvest by Eskimo Point hunters, expressed as numbers of animals, for the period October 1983 to September 1984	19
12 The estimated harvest by Rankin Inlet hunters, expressed as numbers of animals, for the period October 1983 to September 1984	20
13 The estimated harvest by Repulse Bay hunters, expressed as numbers of animals, for the period October 1983 to September 1984	21
14 The estimated harvest by Whale Cove hunters, expressed as numbers of animals, for the period November 1983 to September 1984	22
15 The reported and estimated harvest by Baker Lake hunters expressed as numbers of animals	23
16 The reported and estimated harvest by Chesterfield Inlet hunters expressed as numbers of animals	24
17 The reported and estimated harvest by Coral Harbour hunters expressed as numbers of animals	25
18 The reported and estimated harvest by Eskimo Point hunters expressed as numbers of animals	26
19 The reported and estimated harvest by Rankin Inlet hunters expressed as numbers of animals	27
20 The reported and estimated harvest by Repulse Bay hunters expressed as numbers of animals	28
21 The reported and estimated harvest by Whale Cove hunters expressed as numbers of animals	29
22 Monthly theoretical kill factors for seven Keewatin communities	30
23 The harvest by species over the range of age for Baker Lake hunters covering the period 1981 to 1984	31

<u>Table</u>	<u>Page</u>	<u>Figure</u>	<u>Page</u>
24 The harvest by species over the range of age for Chesterfield Inlet hunters covering the period 1981 to 1984 . . .	32	2 Example of the field diary in Inuktitut and English provided to hunters for the calendar year 1984	55
25 The harvest by species over the range of age for Coral Harbour hunters covering the period 1981 to 1984 . . .	33	3 Zone maps for the harvest years, October 1981 through to September 1984, showing the harvest of ringed seal by area in the Keewatin District	56
26 The harvest by species over the range of age for Eskimo Point hunters covering the period 1981 to 1984 . . .	34	4 Zone maps for the harvest years, October 1981 through to September 1984, showing the harvest of common eider by area in the Keewatin District	59
27 The harvest by species over the range of age for Rankin Inlet hunters covering the period 1981 to 1984 . . .	35	5 Zone maps showing the monthly harvest of caribou by area for Baker Lake for the period November 1981 to September 1984. Data for August and September 1982 are not available	62
28 The harvest by species over the range of age for Repulse Bay hunters covering the period 1981 to 1984	36	6 Histogram showing the percent relative frequency of caribou harvested per hunt by hunters from the seven Keewatin communities for the years 1981 to 1984	71
29 The harvest by species over the range of age for Whale Cove hunters covering the period 1981 to 1984	37	7 Histogram showing the percent relative frequency of ringed seal harvested per hunt by hunters for the years 1981 to 1984	75
30 Data on the distribution of hunters that were successful in obtaining a harvest expressed as a percentage over the range of age of hunters for the period October 1983 to September 1984.	38	8 Histogram showing the percent relative frequency of snow geese harvested per hunt by hunters for the years 1981 to 1984	78
31 Edible weight values in kilograms for harvested species as calculated from various sources	39		
32 Reported and estimated edible weight values (kg) for harvested species for the period October 1983 to September 1984.	an		
33 Reported and estimated edible weight values for four major groups of animals harvested by Keewatin communities, October 1983 to September 1984.	43		
34 Prices of commodities sold in each Keewatin community compared to country foods sold in Frobisher Bay (new name Iqaluit)	50		
35 The harvest of caribou in the Keewatin Region for the period October 1983 to September 1984	51		
36 Age distribution of hunters for the seven Keewatin region communities for the period October 1983 to September 1984.	53		

<u>Appendix</u>	<u>LIST OF Appendices</u>	<u>Page</u>
1	Members of the Steering Committee for the Keewatin Wildlife Federation Harvest Study	91
2	Calculation of Estimated Harvest	92

LIST OF FIGURES

<u>Figure</u>	<u>Page</u>
1 Map of Keewatin District showing the seven communities surveyed during the harvest study and the zonal grid used to locate kills	54

ABSTRACT

Gamble, R.L. 1987. Native harvest of wildlife in the Keewatin Region, Northwest Territories for the period October 1983 to September 1984. Can. Tech. Rep. Fish. Aquat. Sci. 1543: v + 82 p.

Harvest data have been collected from Inuit hunters of the Keewatin Region since 1981 under the auspices of an ongoing program operated by the Keewatin Wildlife Federation. Funding has been provided through interested federal and territorial government departments. Results for the period October 1981 to September 1983 have been published in Gamble (1984). This report is an update and supplement to that document for the survey period October 1983 to September 1984. Data were aggregated at a community level. There were less problems with the collection of harvest data on a consistent basis during the latter period of survey than was experienced from 1981 to 1983. This was attributed to a greater appreciation of the objectives of the study by residents and a more concerted effort by fieldworkers in the collection of data probably because of better training and more experience. Survey techniques underwent few changes because they appeared appropriate to obtain the required information. The analysis of harvest data in this report has been enhanced by developing computer programs which provide the distribution of selected species by geographic zone and the breakdown of harvest data into various categories by age group of hunter. The results of these analyses cover the entire period from October 1981 to September 1984.

Key words: resource management; catch statistics; domestic harvest, monitoring; food resources; country foods; terrestrial mammals; marine mammals; birds; fish; computerized harvest study; Inuit organization.

RÉSUMÉ

Gamble, R.L. 1987. Native harvest of wildlife in the Keewatin Region, Northwest Territories for the period October 1983 to September 1984. Can. Tech. Rep. Fish. Aquat. Sci. 1543: v + 82 p.

Des données sur les prises/captures sont recueillies auprès de chasseurs inuit de la région du Keewatin depuis 1981 dans le cadre d'un programme continu dont la Keewatin Wildlife Federation assure l'application. Le financement nécessaire pour le projet vient des ministères fédéral et territorial en cause. Les résultats pour la période d'octobre 1981 à septembre 1983 ont déjà été publiés (voir rapport technique no. 1282); le présent rapport constitue donc une mise à jour et un complément à ce rapport pour la période d'octobre 1983 à septembre 1984. Les données ont été rassemblées par collectivité; pour cette période, il a été plus facile de recueillir les données sur les prises/captures de manière conséquente que lors de la période de 1981 à 1983, parce que les résidents étaient davantage au fait des objectifs de l'étude et que les responsables de la collecte des données

sur le terrain ont travaillé avec plus de concertation sans doute parce qu'ils étaient mieux formés et qu'ils avaient plus d'expérience. Les techniques d'étude n'ont subi que de très légères modifications, car elles semblaient convenir pour la collecte des données requises. L'analyse des données sur les prises/captures dans ce rapport a été améliorée par la mise au point de programmes informatiques permettant d'obtenir la distribution d'espèces choisies par secteur géographique et de répartir ces données en diverses catégories selon les chasseurs, par groupe d'âge. Le résultat de ces analyses porte sur la totalité de la période visée, soit d'octobre 1981 à septembre 1984.

Mots-clés: gestion des ressources; statistiques Sur les prises; chasse/pêche de subsistance; contrôle; ressources alimentaires; ressources alimentaires indigènes; mammifères terrestres; mammifères marins; oiseaux; poisson; étude des prises/captures par ordinateur; organisation inuit.

INTRODUCTION

In September, 1981, a study was initiated for the collection of harvest data from hunters residing in the Keewatin Region of the Northwest Territories. The preliminary results for the period October 1981 to September 1983 have been published in Gamble (1984). This report covers the period October 1983 to September 1984 and is an update and supplement to the first report. Hunter is defined in the MATERIALS AND METHODS section below and throughout this report hunter, harvester, trapper and fisherman are used as synonyms.

The main objectives of the study as specified in the contract covering this survey period were to:

- 1) determine by survey techniques the hunter kill (i.e. harvest) by Inuit living in District of Keewatin communities and outpost camps;
- 2) develop an approach for the collection of timely, statistically reliable data on wildlife harvesting which could be undertaken by an agency such as the Keewatin Wildlife Federation (KWF) upon completion of the preliminary study;
- 3) determine the number of Inuit directly participating in subsistence harvesting in each community and to compare the proportion of harvest taken by hunters of different ages;
- 4) provide an estimate of the harvest sufficient to determine a measure of its value to each community as food or income, and
- 5) analyze and publish the data collected in a timely report and scientifically acceptable format.

The study area (approximately 386 000 km²), includes the entire Keewatin district of the Northwest Territories and contains seven permanent communities (Fig. 1). Listed north to south they are Repulse Bay, Baker Lake, Coral Harbour, Chesterfield Inlet, Rankin Inlet, Whale Cove and Eskimo Point. For ease of discussion the convention has been adopted of listing these communities alphabetically throughout this report. Current information about these communities including population size can be obtained from the NWT Data Book (1984).

Historically the Inuit were not concentrated in these locations but were scattered in small groups that migrated with the seasons to various sites throughout the boreal-tundra ecotone of the Keewatin region, and along the adjacent coastline of Hudson Bay. Some hunters still hunt from outpost camps for specific species such as caribou rather than from a more centralized community base.

MATERIALS AND METHODS

GENERAL

For this survey period fieldworkers continued to try and include 100% of the region's hunters in their monthly collection of data. Included in the term hunter are Inuit males and females over 16 who hunt (they may or may not have a NWT general hunting licence), Inuit youths under 16 who hunt regularly, and some long term residents in the area of other ethnic origin who hunt. Even with the inclusion of this latter category Inuit comprise over 99% of the total hunters in the region and account for 99% of the harvest for all species. The study design remained the same as described in Gamble (1984) and data were aggregated at the community level. A separate coverage of outpost camps was not necessary because Inuit hunting from such locations visited their home communities frequently during the survey period and it was possible to include their harvest together with that of community based hunters on a consistent basis.

HUMAN RESOURCES

Following the procedure developed during the 1981-1983 preliminary study (Gamble 1984) Inuit fieldworkers were hired in each of the seven communities to interview hunters and collect data. Duties included explaining the project to hunters; distributing the study materials (calendars and field notebooks) to hunters; keeping an up to date list of hunters; interviewing hunters beginning on the first day of each month to collect harvest statistics for the previous month and recording this information on appropriate data sheets; making sure the data collected were as accurate as possible; and promptly forwarding a monthly report following an interview period to the Project Biologist located at Rankin Inlet.

With relocation of the harvest study offices to Rankin Inlet in October 1983, some changes were made at the Project Office. The Project Manager resigned in October 1983 and rather than fill the vacancy, duties were reassigned. The Project Biologist was given the added responsibility of project direction. A part-time Inuit employee, who was also the Keewatin Wildlife Federation's (KWF) Office Manager, assisted in communicating with fieldworkers, Hunters' and Trappers' Associations, Hamlet Councils, and resident hunters. This person was also responsible for translation of data received, from Syllabics into English. A part-time secretary was also available to the study and assisted with data entry.

MATERIALS

There were few revisions made to the data sheets, calendars or field diaries used previously and described by Gamble (1984).

Field diaries changed from a bi-weekly to a monthly format (Fig. 2) and the Inuktitut and English versions were combined into a single

diary. This was done for reasons of size (portability), cost, and ease of distribution. Calendars were not provided for the six-month period January to June 1984 because of financial constraints but these were provided for the remainder of the study period.

DATA COLLECTION AND ANALYSIS

The system used to analyze harvest data and to arrive at estimates of the total hunter kill by community remained the same as developed during the 1981-1983 preliminary study (Gamble 1984).

Beginning on the first day of each ninth **fieldworkers** began interviews so that they could divide the hunter population for each **community** into the survey categories defined below. The number of animals killed per species were listed for successful hunters who were interviewed. The monthly interval was defined as an interview period and covered the previous month of hunting. The fieldworker submitted this information to the Project Office where the data were summarized each **month** against a master list of hunters for individual communities and then entered into the computer. The numbers in some categories were subsequently adjusted the second month past an actual hunting episode if acceptable reports were submitted by **fieldworkers** on hunters who were missed in the first interview period. Acceptable reports were determined through a subjective **judgement** by the Project **Biologist** based on his experience and a comparison of the thoroughness of the information provided in late reports with reports submitted on time.

<u>Definition</u>	<u>Category</u>
1) The number of hunters who report taking a harvest during an interview period (i.e. successful).	A
2) The number of hunters who report they were not successful in taking a harvest during an interview period (i.e. unsuccessful).	B
3) The number of hunters who report they did not hunt during an interview period (i.e. didn't hunt).	C
4) The number of hunters who were out hunting during the interview period but who were not interviewed (i.e. hunted but not interviewed).	D
5) The number of hunters who were out E of the area of the harvest survey during the interview period for any reason (i.e. out of hunt area).	E
6) The number of hunters within the F harvest study area during the interview period whose activities were unknown (i.e. activities unknown).	F

It should be noted that the number of hunters in categories D and E for any month is usually known with a high degree of accuracy because of the small size of the communities involved and common local knowledge concerning the whereabouts of individuals, especially when it pertains to trips outside the local area.

Subsequently the **summarized monthly information** contained in categories A through F was used to calculate ratios of participation and hunter success. The term participation may be ambiguous. For this study participation ratio refers to the percent of hunters in each **community** who were interviewed as part of the study in relation to the total number of hunters who could have hunted each month. This ratio is intended to give a measure of the coverage of the potential hunter population each month by the **fieldworker**. It is not meant to give a measure of the hunters involved in each month's harvest. The hunter success ratio was applied to hunters in categories D and F to obtain an estimate of probable hunter success within these groups. The results for all categories were **summed** to get an estimate of total hunter success and to calculate the theoretical kill factor. This is the value by which the reported **kill** per species is multiplied to arrive at the estimated harvest. Appendix 2 gives an **analogue** of the steps used to arrive at the estimate of total monthly kill using interview data.

For the purpose of this analysis four main assumptions were made:

- 1) The involvement of hunters in the harvest is the same for those whose activities are unknown as for those that are known.
- 2) The success ratio is the same for hunters who hunted in the unknown categories as for the known categories.
- 3) The probability of a kill of any individual animal is the same for all species when calculating the estimated harvest.
- 4) Reported kills are accurate.

DATA PROCESSING

The project was designed to make use of computers to accommodate the timely analysis of data and to eliminate transcription errors as far as possible. Gamble (1984) describes the eight interrelated subsystems (i.e. entry, participation, hunters, zones, animals, transfer, annual and monthly) that were developed for the 1981-83 preliminary survey using a data base by Stoneware (118 Master 1982) for the Apple II microcomputer.

For this survey period the analysis of harvest data has been enhanced by the addition of several programmed which allow the presentation of data on the distribution of harvested species by geographic zone (Fig. 3 to 5) and a breakdown of the reported kill by species over a range of age groups for the hunters. Following Gamble (1984), hunters were arranged into age groups automatically calculated from the birthdate and the current date. Age classes used were: 0-15, 16-30, 31-45, 46-60, 61-75, and 76-99. The design of the program dictated there had to be a category for hunters with unknown ages. The age group 76-99 was used for this purpose because only 8 hunters of known age fell within this group.

In Tables 23 to 29 the kill statistics for each species over the range of age groups of hunters are reported as the number of animals harvested Per age class of hunter. In addition data are presented on the distribution of hunters who were successful in obtaining a harvest over the range of ages of hunters for each community and summarized for the region in Table 30.

For the 1981-83 survey edible weight values for each species were calculated from the data by hand. For this survey period, a programme was devised to compute these values. The DB master system was modified to allow the calculation of the frequency that a particular number of a given species is harvested relative to the total number of hunting episodes over the harvest year by community. In Fig. 6 to R this has been termed the relative frequency of a selected species.

RESULTS

Tables 1 through 21 summarize the results from analysis of the data collected between October 1983 and September 1984. Tables 1 through 7 give the reported monthly harvest by species for each community expressed as numbers of animals and also the percent of hunters reporting (i.e. participation ratio). Tables 8 through 14 give the estimated monthly harvest by species for each community expressed as number of animals. Tables 15 through 21 provide the annual reported and estimated harvest by species for each community. In these latter tables, the mean monthly harvest per hunter and the standard deviation about the mean are also reported.

Tables 1, 9 and 15 give the harvest information for the community of Raker Lake and cover a full 12 month period. The separation of the caribou harvest into herd categories is a difficult problem in the Raker Lake area as this community has seasonal access to at least three herds. From January to April 1984, caribou harvested north and slightly west of Raker Lake were assigned by the author to the Beverly herd using criteria defined in Gamble 1984. However, aerial surveys over the area by the Government of the Northwest Territories Department of Renewable Resources indicated that some animals had probably migrated from the northeast. This suggests some animals defined as being from the Beverly herd, during the January to April period may actually have been from the Wager Bay caribou herd. Only continuous aerial reconnaissance would have provided an accurate separation.

Tables 2, 9 and 16 give harvest levels for the community of Chesterfield Inlet for a 12 month period. Though the percent of hunters reporting in this community is high, there is some question as to the accuracy of this participation ratio. This is elaborated on in the discussion section. The separation of caribou into herds by location of harvest was treated in the same fashion as in Gamble (1984).

Tables 3, 10 and 17 give harvest levels for the community of Coral Harbour for a 12 month period. However data was not collected on hunter participation until February 1984. The values for the months of October to January in Table 3 represent only successful hunters. Due to inexperience the fieldworker only collected information from successful hunters and did not categorize those hunters who were unsuccessful, did not hunt etc. This mistake was rectified in February 1984. Therefore for the period October 1983 to January 1984 the best estimate of the actual community harvest was taken to be the reported harvest. This is consistent with the approach taken by Gamble (1984; page 11, Participation).

Tables 4, 11 and 18 give the harvest information for the community of Eskimo Point for a 12 month period. The fieldworker resigned in May without notifying the Project Office, and data collection was late for this month due to delays in acquiring and training a new worker. Therefore results for May may not be complete, particularly for some species such as geese or for the goose egg harvest.

Tables 5, 12 and 19 give the data collected at the community of Rankin Inlet for a 12 month period. Some commercial landings for char have inadvertently been included with the domestic harvest. During the survey three fishermen reported a harvest of 673 char as part of the domestic harvest. However it was subsequently determined these were sold commercially through the Rankin Inlet fish plant and should not have been included. If commercial landings are inadvertently included with the domestic landings this would result in an overestimate of the total domestic harvest. This situation would be exacerbated if the landings were also included in the commercial harvest because a double counting would occur. Thus far it seems that such inclusions have been negligible to the overall estimate of domestic harvest. However, this source of error should be continuously checked so that a large error does not occur.

Tables 6, 13 and 20 give the data received from Repulse Bay for a 12 month period. Emigration and to a lesser extent immigration has made it difficult to establish an accurate hunters list for this community. Periodic reviews of the situation suggests that there actually may be less than 90 hunters, the number used in determining the participation ratio since 1981. If the number of hunters is actually less than 90 then the participation ratio is probably underestimated and the estimated harvest probably overestimated. The implications of this are covered in the discussion section.

Tables 7, 14 and 21 show the harvest reported by the community of Whale Cove for an 11 month period. Harvest data were not collected during October because of the resignation of the previous fieldworker without notice and subsequent delays in acquiring a suitable replacement with the proper training. This also resulted in an absence of data on hunter participation for the months of November and December 1983. The values for these months in Table 7 represent only successful hunters. As with the

Coral Harbour data show the reported harvest was taken as being the best estimate of the actual community harvest for these two months.

Table 22 gives the monthly theoretical kill factors which were used in determining the estimated harvest for each community. Error is greatest for those values significantly larger than one as discussed by Gamble (1984).

Tables 23 through 29 give kill statistics for each species over the range of age groups for hunters covering the years October 1981 to September 1982, October 1982 to September 1983 and October 1983, to September 1984. In communities where land-locked Arctic charr were reported, that harvest was combined with sea run Arctic charr in these tables. The data on animals harvested by hunters of unknown ages were not included. This accounts for small discrepancies in the monthly and annual harvest figures when comparing these tables with Tables 1 to 7 and 22 to 29 of this report and odd numbered Tables 1 through 13 in Gamble (1984).

Table 30 presents data on hunters who were successful in obtaining a harvest over the range of age of hunters. The distribution of successful hunters is expressed as a percentage over the range of ages by month and harvest year for each community and as a regional total. No hunters reported in the age category 0 to 15 for the communities of Repulse Bay and Whale Cove. Also there were no harvest data for Whale Cove for the month of October 1983.

Table 31 gives the estimated individual species values for edible weight (kg) used to calculate the total edible weights given Tables 32 and 33. These individual values were defined using the information sources noted and are the same as those given in Gamble (1984; Table 16). In Table 32 the total edible weight values for reported and estimated categories are the sum of the annual species values. These totals differ slightly from those given in Table 33 because of rounding off of values.

Table 34 provides a list of prices (taken January 1985) for meat and fish commodities retailed in stores in the seven Keewatin communities compared to country food products retailed in Frobisher Bay. These can be used to determine a current commercial value for country products.

Caribou are an important component of the native harvest in the Keewatin Region. Table 35 gives the reported and estimated harvest of these animals by herd and category for each community for the survey period and summarizes the harvest for the entire region.

Table 36 gives the age distribution of hunters for the seven communities in the region for this survey period.

Figures 3, 4 and 5 show the harvest of selected species, by location for the study years 1981-82, 1982-83 and 1983-84. As examples the annual harvest of ringed seal and eider are shown for the entire region. Also the harvest of caribou is shown on a monthly basis for the

community of Baker Lake. Data on caribou were available for Baker Lake for a 10 month period in 1981-82, 11 months in 1982-83, and 12 months in 1983-84.

Figures 6, 7 and 8 are histograms showing the relative frequency of caribou, ringed seal and snow geese harvested per hunt for the study years 1981 to 1984. Data were not available or samples were too small to provide histograms for all species in every community for the examples selected.

These figures are presented as examples to show the capability of the study to provide geographic or graphical information on harvest. It is not possible to present the entire harvest in this way in a report because of the sheer volume of figures that would be required depending on the categories or harvest presented. However such information can be generated upon specific request to the study.

DISCUSSION

The results given in Tables 1 through 21 are an improvement over the results reported by Gamble (1984) for the preliminary study. Data collection was less variable both within and between communities for this survey period with the possible exception of Chesterfield Inlet. This overall improvement can be attributed to several factors:

- 1) an improvement in collection effort,
- 2) fewer instances of lost data,
- 3) less turnover of fieldworkers and a quicker response time in replacing those who resigned,
- 4) a hunter public which was better informed concerning the objectives of the study than previously,
- 5) improved translation capability, and
- 6) better information flow.

Other factors such as the recall of individual hunters, availability of species to harvest and financial constraints had an influence on the study but were beyond the control of project personnel. The comment by Usher et al. (1985) that reporting rates may have levelled off to a near maximum at the end of the preliminary study does not seem to be supported in light of the overall increase in participation rates for this survey period. The primary difficulty which must be addressed continually is the maintenance of timely and consistent reporting from all communities.

COLLECTION EFFORT

One of the major objectives of the study is to involve all Inuit from the region as participants in order to acquire an approximation of the kill that is as close to the actual harvest as possible. The entire system is dependent upon fieldworkers contacting as many traditional users of wildlife as possible, and the subsequent cooperation of hunters in providing the necessary harvest information. The goal

for **fieldworkers** was to try and include 100% of each **community**'s hunters in the monthly collection of **data**. Putting this into practice was difficult and requires ongoing attention for several reasons.

Socially, this kind of data collection is foreign to **Inuit** culture and there is a reluctance to divulge information of this sort especially to strangers. This problem is not unique to **Inuit**. Cooperation has increased largely because of the involvement of the **Keewatin Wildlife Federation** and because the majority of project personnel are **Inuit**. Also the publication of the results for the preliminary study (Gamble 1984) and especially the **Inuktitut** translation gave visible evidence of the work done.

Participation is a measure of the amount of effort (number of contacts) made by **fieldworkers** at a **community** level and this effort directly affects the results that were **obtained**. The worker must make an effort to contact all hunters and/or collect all the relevant species specific data. **Data** may be incomplete for particular species if all hunters are not contacted or the **fieldworker** fails to record all the data. Low participation rates or high theoretical kill factors (Table 22) are a measure of collection effort and can be used by the **project manager** to indicate where specific attention is required especially when dealing with newly hired **fieldworkers**. For this survey period all communities show a marked improvement in participation ratio over the preliminary survey. For instance data were available on the reported harvest on a consistent basis for all communities except for the month of October 1983 for **Whale Cove**. In addition complete participation information was collected with the exception of **November** and **December 1983** at **Whale Cove** and **October 1983** to **January 1984** at **Coral Harbour**. In comparison during the preliminary survey complete data were only available for the **community** of **Eskimo Point**.

Problems in estimating harvest during this survey period mainly involved the communities of **Chesterfield Inlet** and **Repulse Bay**. At **Chesterfield Inlet**, there is some question as to the accuracy of the data on hunter participation. Even though the participation ratio is consistently high for the survey period for this community, some accounts of individual **hunters** harvests may not have been completely recorded.

At **Repulse Bay** the participation ratio may not be a correct indicator of hunter participation. As previously noted in an earlier section participation ratios may underestimate hunter participation in this **community** and subsequently overestimate the community harvest. For example, **narwhal** catch control tags documented by **Fisheries** and **Oceans** for **Repulse Bay**, report a total of nine narwhal harvested during the report period whereas the study reports a harvest of 20 and an estimated harvest of 31. **Fisheries** and **Oceans** figures are probably a low estimate as many hunters tag only males because of the **tusk**. Females often go unreported. Staff of both **KWF** and **Fisheries** and **Oceans** believe the actual harvest is likely closer to

20. This contention is further supported by data provided in Table 30 (i.e. a community total of 85 successful hunters in **Repulse Bay** over the entire study year). This suggests the fixed value of 90 hunters used for **Repulse Bay** may be in error.

LOST DATA AND FIELDWORKER TURNOVER

The only community where there were no harvest data collected for a short period was **Whale Cove** for the month of **October 1983** as noted above. In addition some data were lost on hunter participation for both **Coral Harbour** and **Whale Cove**. The most common reason data were not obtained was because some **fieldworkers** resigned without first informing project staff. This was sometimes exacerbated by subsequent difficulty in finding replacements to resume collection of information in that community. The solution to this problem is effective staff training involving initial and refresher training coupled with constant communication with **fieldworkers** and **Hunters** and **Trappers Associations** in communities. For example a spring workshop for **fieldworkers** was held **March, 1984** to emphasize the need to contact all hunters and collect data on all species harvested. When resignations occurred, project staff visited the community and provided training to new workers after consultation with the relevant **Hunters** and **Trappers Association** who recommended the new candidate.

Other problems mentioned in **Gamble (1984)** such as data lost in the mail have considerably improved and were not factors that affected the study for this survey period.

MORE INFORMED HUNTER PUBLIC

Using existing communication channels in each community such as **Hunters** and **Trappers Associations**, **Government** of the **Northwest Territories (GNWT)** liaison officers, **GNWT** wildlife officers and the local radio station, the project has established a better informed public who are more willing to provide data on their wildlife harvest. This has led to an improvement in the quality of the data and a greater cooperative effort on the part of the hunters. The relocation of the harvest study office to **Rankin Inlet** also improved communication because of its more central location vis-a-vis the other communities. Also as noted above the publication of the results of the preliminary study, especially the **Inuktitut** version, did much to re-stimulate hunter interest in the study.

Translating DIFFICULTIES

In the preliminary study a higher proportion of **fieldworkers** were fluent only in **Inuktitut**. The project staff encouraged the hiring of **fieldworkers** who were also fluent in English where possible but this was not a criterion used to determine eligibility for employment. However it is evident that some of the anomalies associated with translation were resolved because of the higher proportion of bilingual

fieldworkers that are currently employed by the study. The experience accumulated by the project staff over the period of the study has also helped.

Translation of place names is no longer necessary because reporting the harvest by zone does not require the hunter to provide the place name nor require the staff to interpret these data.

INFORMATION FLOW

Analysis of data is dependent on the smooth flow of reports from the fieldworker to the project office. Failure to collect complete data did not occur as frequently as in the preliminary study. As noted above the **move** of the project office to Rankin Inlet in 1983 **improved communication** and the exchange of **data** at all levels.

HUNTER LISTS AND AGE CATEGORIES

An ongoing task of the study is identifying and keeping an up to date a list of hunters. The harvest study office maintains the master list and continually revises it based on information provided by the GNWT, Hamlet councils, federal departments such as National Health and Welfare, and fieldworkers. As the study progresses inconsistencies and omissions are minimized as the hunter data base becomes more complete.

For this survey period there was less missing information regarding hunters than during the preliminary survey. Although most hunters' names and ages are available to the study, on occasion names were missing from community data sheets due to oversights by fieldworkers. Also in a few instances names were not recognizable from Hamlet Council lists and could not be included in the survey's master list. Usually the main piece of missing information was individual hunter ages. For instance not all ages of individuals are available prior to 1950. The level of occurrence of the age identification problem is variable between communities as shown by Table 36.

There are very few hunters who are 76 years or older. In the computer programs this category was used as a catchall for hunters of unknown age and was not included in these tables giving the breakdown of harvest or hunter population by age group except for Table 36.

New analysis of data based on the age categories of hunters is provided in this report. These include information on the harvest by species over a range of ages for the hunters (Tables 23-29) and data on the distribution of hunters who were successful in obtaining a harvest expressed as a percentage over the range of age of hunters (Table 30).

ANALYTICAL PROCEDURES

One consistent error brought to the authors attention relates to the procedure used in estimating the actual harvest (Topolniski and Thompson 1984; Usher et al. 1985). It was suggested by Topolniski and Thompson that a more accurate method of estimating the success of hunters whose activities are unknown should be $F = (A+B+C)/(A+B+C+D+E)$. Usher et al. (1985) concurred with this point, but believed the actual error would normally be small. This problem was brought to the author's attention too late to be corrected in the current report as it involved changes in programs. These changes will be made for the 1984/85 survey year and compared with previous results.

Usher et al. (1985) also questioned the assumptions on which the estimation procedure is based. They contend that a large potential bias and underestimation may occur through projection of the reported harvests of hunters interviewed to the harvests of hunters not interviewed. However, Ron Graf (GNWT) and the author conducted a detailed examination of data for 1982-83 for Eskimo Point and found approximately 93% of the hunters were contacted 10 or more times over a 12 month period and none were contacted less than three times. On examining four sample communities with high participation rates, Graf (Dep. of Renewable Resources, GNWT, personal communication) concluded that non-response bias was not significant.

In addition Usher et al. (1995) mentioned that it was unclear how the harvest study handled those instances where partial information was supplied on hunter activities within a community. Given such circumstances, the available data on hunter activity from a community were reviewed by project staff and a decision was made either to reject this material as inappropriate or proceed with analysis. The data were judged inappropriate where the fieldworker provided data on successful hunters but did not categorize the remaining hunters.

One unresolved problem does exist. When data are not submitted for various reasons and then received several months after the study year-end (September) loading such data and re-analyzing the harvest estimates delays final analysis and report writing by several months. As the Keewatin Wildlife Federation has contractual obligations to produce reports on the study within time constraints, this material is ignored. Although these data may make no appreciable difference to the estimate of the actual harvest, one cannot be certain unless this assumption is tested. If sufficient funding, time, and technical resources become available, this should be done.

CONCLUSIONS

The Keewatin Wildlife Federation Harvest Study has been successful in adapting a survey technique common in a Euro-Canadian setting but intrinsically foreign to the Inuit to elicit statistically valid harvest information from

hunters. The preliminary work has laid the foundation for a process which has involved native people in the gathering of harvest statistics and the initial success has been maintained through the current survey period. This information will be important for jointly establishing with government a wildlife management rationale for the harvest of species which are of national interest and very particular cultural importance to Inuit. Continued cooperation amongst harvesters and wildlife managers will ensure the long term well-being of wildlife in this region.

During the 1983-84 study year survey techniques underwent few changes because they appeared appropriate to meet requirements. This is borne out by the quality of this study year's harvest data. The analysis of harvest data was enhanced by developing computer programs which provide the distribution of selected species by geographic zone, and the breakdown of harvest into various categories by age group of hunters. Overall, the objectives of the project were met more thoroughly than they were in the preliminary study and results were more reliable as indicated by participation ratios and theoretical kill factors close to 1. Also overall hunter participation rose at the community level.

ACKNOWLEDGMENTS

I thank the Keewatin Wildlife Federation, which was supportive of this study and provided valuable assistance at a regional and community level.

Thanks are also due to members of the steering committee who provided valuable criticism of my manuscript, in particular R. Peet (DFO) and his staff who assisted in the preparation of the final draft. I particularly thank the staff of the Keewatin Wildlife Federation "Harvest Biology Study": Veronica Curley (Assistant Regional Resource Manager), Jodi Bileski (Secretary, Computer Operator) and Oscar Jajalla (Computer Programmer). Their continued efforts in conjunction with the various community fieldworkers made this report possible.

I give special thanks to all hunters who provided data on their harvests and thank them for their continued cooperation and understanding in the face of repeated questions.

Finally I acknowledge the logistic support given to the study by the Regional Government of the Northwest Territories and the financial support of the federal and territorial government agencies who sponsored the study.

REFERENCES

BELLROSE, F.C. 1976. Ducks, geese, and swans of North America. Stackpole Books. 540 p.

BERGER, T. 1977. Northern frontier - northern homeland. The report of the Mackenzie Valley Pipeline Inquiry, 2: 268 p.

BOND, W.A. 1975. Data on the biology of lake whitefish and lake trout from Kaminuriak Lake, District of Keewatin, N.W.T. Can. Fish. Mar. Serv. Data Rep. Serv. CEN/D-75-4: 28 p.

BUREAU OF STATISTICS, G.N.W.T. 1984. Population estimates and projections by region and community. (Internal Memorandum), December 20, 1984.

CARDER, G.W. 1983. Data from the commercial fishery for Arctic charr, *Salvelinus alpinus* (Linnaeus), in the Cambridge Bay and Rankin Inlet areas, Northwest Territories, 1981-82. Can. Data Rep. Fish. Aquat. Sci. 391: v + 24p.

OOME PETROLEUM LTD., ESSO RESOURCES CANADA, LTD., AND GULF CANADA RESOURCES INC. 1982. Beaufort Sea-Mackenzie Delta Environmental Impact Statement. Socio-economic effects 5(5): 42 p.

EARHART, C.M., and N.K. JOHNSON. 1970. Size dimorphism and food habits of North American owl. Condor 72: 251-264.

FALK, M.R., and D.V. GILLMAN. 1975. Data on the lake and round whitefish, lake cisco, northern pike, Arctic grayling and long-nose sucker from the east arm of Great Slave Lake, N.W.T., 1971-74. Can. Fish. Mar. Serv. Data Rep. Ser. CEN/D-75-2: 95 p.

RAMBLE, R.L. 1984. A preliminary study of the native harvest of wildlife in the Keewatin Region, Northwest Territories, Canada. Can. Tech. Rep. Fish. Aquat. Sci. 1282: iv + 48 p.

GRAF, R. 1984. Harvest study supplemental analysis. Unpublished report, Government of the Northwest Territories, Wildlife Service, Yellowknife, N.W.T.

JINGFORS, K. 1984. Kitikmeot Harvest Study. Progress Report, 1983, Government of the Northwest Territories Wildlife Service, Renewable Resources, Cambridge Bay, N.W.T.

KELEHER, J.J. 1964. Round weight conversion factors for Great Slave Lake fish. Fish. Res. Board Can. Manuscr. Rep. Ser. (Biol.) 773: 19 D.

MacDONALD, G., and R. FUDGE. 1979. Arctic Land Use Research Program 1978: A survey of the fisheries resources of the Kazan Upland (Southeastern District of Mackenzie, Southern District of Keewatin, N.W.T.). Can. Dep. Ind. N. Aff. Environ. Stud. 11: 161 p.

NATIVE HARVESTING RESEARCH COMMITTEE (NHRC) 1975. Research to establish present levels of harvesting by native peoples of northern Quebec. Phase 1 (1973-1975). Part II. Montreal. 230 p.

NATIVE HARVESTING RESEARCH COMMITTEE (NHRC)
1976a. Research to establish present levels of harvesting by native peoples of northern Quebec. Part II. A report on the harvesting by the James Bay Cree.

NATIVE HARVESTING RESEARCH COMMITTEE (NHRC)
1976b. Research to establish present levels of harvesting by native peoples of northern Quebec. Part II. A report on the harvesting by the Inuit of Northern Quebec.

NWT DATA BOOK. 1984/85. A complete information guide to the Northwest Territories and its communities. M. Devine (ed.) Outcrop Ltd., The Northern Publishers, Yellowknife. 220 p.

RIEWE, R. 1977. Utilization of wildlife in the Jones Sound region by the Griese Fiord Inuit, p. 623-644. In L. C. Bliss (ed.) True Love Lowlands, Devon Island, Canada: a high Arctic ecosystem. University of Alberta Press, Edmonton.

SERGEANT, D. E., and P. S. BRODIE. 1969. Body size in white whales, *Delphinapterus leucas*. J. Fish. Res. Board Can. 26: 2561-2580.

STEVENS, W. J. D. 1965. Bionomics of the sandhill crane. Ph.D. Thesis. University of Saskatchewan, Saskatoon. 120 p.

THOMAS, V. G. 1980. Energetic reserves of Hudson Bay willow ptarmigan during the winter and spring. Can. J. Zool. 60: 1618-1623.

TOPOLNISK, O., and P. THOMPSON. 1984. Internal Memorandum, Department of Fisheries and Oceans, October 10, 1984.

USHER, P. J., D. DELANCY, M. SMITH, G. WENZEL, and P. WHITE. 1985. An evaluation of native harvest study methodology in northern Canada. A report to the Environmental Studies Revolving Fund Committee, Department of Indian Affairs and Northern Development. ESRP 205-30-06(F). 234 p.

Table 1. The reported harvest by Baker Lake hunters, expressed as numbers of animals, for the period October 1983 to September 1984.

Species	Category ¹	1983			1984									Sum
		Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	
Caribou²														
Kaminuriak	M	26	13	51				65		45	275	26	10	511
	F	66	25	28				28		3	28	37	21	236
	u									3	8		2	13
	Subtotal	92	38	79				93		51	311	63	33	760
Beverly	M	35	163	82	151	337	457	424	46		73		235	2003
	F	116	271	93	100	247	292	234	7		3		197	1560
	u		4			9			2		1		5	21
	Subtotal	151	438	175	251	593	749	658	55		77		437	3584
Wager	M	11	4	37				4	356	116	111	267	310	1216
	F	20	4	31	2				80	17	9	242	191	596
	U								29	21	14	2	4	70
	Subtotal	31	8	68	2			4	465	154	134	511	505	1882
Other	M				60			2					1	63
	F				58									58
	u				4									4
	Subtotal				122			2					1	125
	Total	274	484	322	375	593	749	757	520	205	522	574	976	6351
Muskox							13							13
Grizzly Bear													1	1
Arctic Fox			16	275	124	156	180	5						756
Wolf		1	3	11		12	25	1						53
Ringed Seal									2	3			1	6
Canada Geese									142	142				284
Snow Geese									138	201				339
Ptarmigan													349	349
Goose Eggs										2722				2722
Arctic Charr										138			65	203
Lake Trout		1732	509	178	76	157	268	241	79	175	72	87	182	3766
Whitefish sp.				72	50	151	144	135	17		17	27	22	635
Northern Pike													25	25
Arctic Grayling													25	25
Percent of Hunters Reporting		98.7	93.2	97.8	96.1	96.7	95.2	97.4	94.4	100.0	95.9	96.6	95.8	

¹Categories are as follows: M means male, F means female, C means calf, and U means unknown.

²Some of the caribou harvest assigned to the Beverly herd for the period January to April may in fact be part of the Wager Bay herd.

Table 2. The reported harvest by Chesterfield Inlet hunters, expressed as numbers of animals, for the period October 1983 to September 1984.

Species	Category ¹	1983			1984								Sum
		Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	
<u>Cari bou</u>													
Kaminuriak	M		1	11	12				25			5	54
	F			6	15		1		4			1	27
	U											2	2
	Subtotal		1	17	27		1		29			8	83
North of Chesterfield	M	12	3		16	31	38	17	5	10	10	35	177
	F	3	16		18	9	4		1	2	7	5	65
	U				5				3	2			10
	Subtotal	15	19		39	40	42	17	9	14	17	40	252
Other	M								5				5
	U								1				1
	Subtotal								6				6
	Total	15	20	17	27	39	41	42	52	9	14	25	301
Polar Bear			4		1		4						9
Arctic Fox				25	2	2	2						33
wolf			2	9	5	4							20
Ringed Seal		6	5	2			3		5	6	3	3	40
Bearded Seal		3										1	4
Walrus						1	A			2			7
Reluga											3	4	11
Canada Geese										7			7
Eider										1			1
Canada Goose Eggs												2	2
Duck Eggs										7			7
Other Fowl Eggs										6			6
Sea Run Arctic Charr									1		11	4(VI)	50
Lake Trout			43					1	44	24			112
Sculpin sp.										1			1
Percent of Hunters Reporting ²		100.0	88.3	98.3	93.3	92.7	100.0	100.0	78.1	96.9	87.0	98.4	100.0

¹See Table 1.²Even though the participation ratio is consistently high for the survey period for this community, accounts of individual hunters harvests may not have been completely recorded.

Table 3. The reported harvest by Coral Harbour hunters, expressed as numbers of animals, for the period October 1983 to September 1984.

Species	Category ¹	1983			1984								Sum	
		Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.		Sept.
<u>Cari bou</u>														
Kaminuriak	u						3							3
	Subtotal						3							3
Wager	M							50				6		56
	F							65				2		67
	u							46						46
	Subtotal							161				8		169
Coates	M				16									16
	F				9									9
	u	1		10										11
	Subtotal	1		10	25									36
Southampton	M		4				5	16	2	2	68	24		121
	F						13	15			43	23		94
	u							2			53	1		56
	Subtotal		4				18	33	2	2	164	48		271
	Total	1	b	10	25		3	179	33	2	172	48		479
Polar Bear		20	9	1	4									34
Arctic Fox			126	51	85	52	76	102						492
wolf									1					1
Arctic Hare								1						1
Ringed Seal		59	87	13	134	97	47	34	40	141	54	14	28	748
Bearded Seal		2	4	1	4	7	14	2		5	9	3	6	57
Harp Seal					A	3					1	9	2	19
Seal sp. (unknown)						1								1
Walrus		5			4		1		4		2	8	9	33
Beluga		2	1		2	1				3	24	35	15	83
Canada Geese								9	100			16		126
Snow Geese					3	20		4	227	5015		21	70	5360
Brant Geese								3	1					4
Geese								2	75					77
Eider		12	3					10	6				11	42
Ptarmigan		134	99	127	158	145	28	235	129				62	1117
Swan								4						4
Fowl						2								2
Canada Goose Eggs										70				70
Snow Goose Eggs										10193				10193
Goose Eggs										30				30
Sea Run Arctic Charr		616	366	57	300	11	2	174	76	367	197	480	18	2664
Land Locked Arctic Charr											0			9
Other Freshwater Fish												13		13
Arctic Cod									149	12	3			164
Percent of Hunters Reporting*		27.6	22.9	16.2	32.4	95.7	85.7	82.9	70.5	96.3	73.3	67.6	50.0	

¹ See Table 1.

² Complete information on hunter participation was not collected in this community until February and the values for October to January represent only successful hunters.

Table 4. The reported harvest by Eskimo Point hunters, expressed as numbers of animals, for the period October 1983 to September 1984.

Species	Category ¹	1983			1984									Sum
		Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May ²	June	July	Aug.	Sept.	
Cari bou														
Kaminuriak	M	118	44	33	18	45	119	61	6	7	151	66	209	877
	F	189	50	115	157	280	333	254	14	4	17	22	133	1569
	c	16	8					2	1			15	42	84
	U	31	10	5	18	16	13	18	12	9	5	9	28	174
	Total	354	112	153	193	341	465	335	33	20	173	112	412	2703
Moose							3		1					4
Polar Bear		7	12				1		1					21
Arctic Fox			40	103	117	136	162	55	1					614
Red Fox			2		1	16	9	4						32
Wolf		2	4	5		2	12	30	2					57
Weasel													2	2
Arctic Hare			2					6					1	9
Ringed Seal		107	36		17	28	20	39	36	39	44	13	119	498
Bearded Seal		11	2				2	14	6	2	3	2	8	50
Harbour Seal											1	1		2
Harp Seal		1							2					3
Beluga											35	15		50
Canada Geese									445	188			8	641
Snow Geese									107	14			1	122
Geese									12					12
Eider									1	2			8	11
Old Squaw										8				8
Mallard			1											1
Ptarmigan		9	67	12	5		20	110	7			1	119	350
Swan									1					1
Canada Goose Eggs									381					381
Snow Goose Eggs									5					5
Goose Eggs										60				60
Sea Run Arctic Charr		76	38	30				2	159	169	1238	593	136	2441
Land-Locked Arctic Charr		7							3					10
Lake Trout		66	157	231			4	182	62	136	8	6	90	951
Whitfish sp.			100	8									40	148
Northern Pike													14	14
Arctic Grayling		355	46					10					14	425
Other Freshwater Fish			19										1	20
Arctic Cod														3
Sculpin sp.														3
Percent of Hunters Reporting		98.8	98.4	97.0	98.3	94.6	93.2	93.9	99.1	98.2	99.2	98.4	84.1	

¹See Table 1.²Data collection was late for May because of changeover of fieldworkers and information may not be complete especially for the various geese and egg harvests.

Table 5. The reported harvest by Rankin Inlet hunters, expressed as numbers of animals, for the period October 1983 to September 1984.

Species	Category ¹	1983			1984									Sum
		Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	
<u>Cari bou</u>														
Kaminuriak	M	26	52	60	68	116	88	105	93	8	46	39	35	736
	F	25	36	68	28	55	60	66	18		1	5	6	368
	c		2	1		3						2		8
	u	3		25		2	21	13	13	13	1	1		92
	Subtotal	54	90	154	96	176	169	184	124	21	48	47	41	1204
<u>North of Chesterfield</u>														
	M					13						1	27	41
	F					18							18	36
	u											7		7
	Subtotal					31						8	45	84
	Total	54	90	154	96	207	169	184	124	21	48	55	86	1288
Polar Bear			3	3		1	1			1				9
Arctic Fox			20	32	16	19	20	9						116
Wolf				1		2	3	3	1					10
Wolverine						1								1
Arctic Hare											3		3	6
Arctic Ground Squirrel											1			1
Ringed Seal		25	20		3		6	4	34	125	84	28	10	339
Bearded Seal		1	1				2	4	2	7	7	1		15
Harbour Seal													1	1
Harp Seal												1		1
Seal sp. (unknown)									3					3
Walrus								1						1
Reluga										2	9	49	5	65
Canada Geese									11	376		9		396
Snow Geese									147	51			39	237
Brant Geese												8		8
Eider			1				1			7	10	7	3	24
Ptarmigan						10		146	68	13		7	7	251
Sandhill Crane									2					2
Swan									4	1		2		7
Other Fowl											1			1
Canada Goose Eggs										94				94
Other Fowl Eggs											16			16
Sea Run Arctic Charr ²		52	385	482	288	73	91	53	33	861	526	1 804	42	46902
Land-Locked Arctic Charr									19					19
Lake Trout			47			17		113	164		7	21		369
Whitefish sp.			6					1						7
Percent of Hunters Reporting		51.3	81.5	92.2	90.4	89.3	91.0	97.5	74.4	90.3	82.4	100.0	85.8	

¹See Table 1.²Included in this harvest are 673 Arctic charr which were sold commercially through the Rankin Inlet fish plant.

Table 6. The reported harvest by Repulse Bay hunters, expressed as numbers of animals, for the period October 1983 to September 1984.

Species	Category ¹	1983			1984									Sum
		Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	
<u>Cari bou</u>														
Kaminuriak	M							25						25
	F							4						4
	u							1						1
	Subtotal							30						30
Wager Bay	M	30	6	7	9	32	22	19	22	72	33	148	61	461
	F	14	8	7	12	23	34	11	4	7	4	61	23	208
	C		2									3		5
	u	11	10		3	6	21	26		8	3	1	10	99
	Subtotal	55	26	14	24	61	77	56	26	87	40	213	94	773
North of Chesterfield	M								17					17
	Subtotal								17					17
Other	M								5					5
	u								1					1
	Subtotal								6					6
	Total	55	26	14	24	61	77	56	79	87	40	213	94	826
Polar Bear			6	1		1	1							9
Arctic Fox			68	33	21	10	19	9						160
Red Fox			1			1								2
Wolf		2	7	1	1	2	10	1	3					27
Wolverine			2			2	1	1						6
Arctic Hare						2	1							3
Ringed Seal		50	10		5	5	5	9	14	97	70	65	37	367
Bearded Seal		1									3	12	1	17
Harp Seal											1	3		4
Walrus												7	1	3
Beluga												1	8	7
Narwhal											8	11	1	20
Canada Geese									3	7				5
Snow Geese									3					3
Eider										4				4
Old Squaw ptarmigan										5				5
Sandhill Crane						3		3		3			5	39
Sea Run Arctic Charr		67	396	22					1					1
Land-Locked Arctic Lake Trout		18							10	523	147	381	6	1552
Other Freshwater Fish		1							44					18
		125												45
														125
Percent of Hunters Reporting ²		57.8	66.7	41.1	58.9	44.4	54.4	51.1	73.3	71.1	51.1	75.0	58.9	

¹See Table 1.

²It has not been possible to accurately establish the number of hunters for this community and the actual number of hunters may be less than that used by the harvest study. If so the participation ratio is slightly underestimated.

Table 7. The reported harvest by Whale Cove hunters., expressed as numbers of animals, for the period November 1983 to September 1984.

Species	Category ¹	1983			1984									Sum
		Oct. ²	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	
<u>Cari bou</u>														
Kaminuriak	M	28	10		27	46	51	16	19	12	8	12	20	249
	F	36	15		5	32	76	38	10	7			12	231
	U	7	2											9
	Total	71	27		32	78	127	54	29	19	8	12	32	489
Polar Bear		5				2		1						8
Arctic Fox		10	26											36
wolf		1	3			3		2						9
Arctic Hare											2	5		7
Ringed Seal		3			3	5	4	5	19	2(-1)	9	4	13	85
Bearded Seal								1				1		7
Harbour Seal											2	2		4
Beluga												13	5	18
Canada Geese									10	9				19
Snow Geese									200	186	25		4	415
Eider									8					8
Ptarmigan								5	6					11
Goose Eggs									21					21
Sea Run-Arctic Charr		63	30		12			7	2	60	177	322	19	692
Land-Locked Arctic Charr									1					1
Lake Trout					9	14	90	93	71	12				288
Percent of Hunters Reporting ²		30.0	14.0		52.0	98.0	98.0	100.0	77.6	70.7	69.9	71.0	88.7	

¹See Table 1.

%0 harvest data were collected in October because of changeover of fieldworkers and complete information on hunter participation was not collected in this community until January. The figures for November and December represent only successful hunters.

Table 8. The estimated harvest by Baker Lake hunters, expressed as numbers of animals, for the period October 1983 to September 1984.

Species	Category ¹	1983			1984									
		Ott.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Sum
Caribou²														
Kaminuriak	M	26	15	51				65		45	275	26	10	512
	F	66	27	28				28		3	28	37	21	238
	U									3	8		2	13
	Subtotal	92	41	79				93		51	311	63	33	763
Beverly	M	35	173	82	151	337	457	424	50		73		235	2017
	F	116	290	93	100	247	292	234	8		3		197	1580
	U		4			9			2		1		5	21
	Subtotal	151	467	175	251	593	749	658	60		77		437	3618
Wager	M	11	4	37				4	388	116	111	267	310	1248
	F	20	4	31	2				88	17	9	242	191	604
	U								32		21	14	2	73
	Subtotal	31	8	69	2			4	508	154	134	511	505	1925
Other	M				60			2					1	63
	F				58									58
	U				4									4
	Subtotal				122			2						125
Total	274	516	322	375	593	749	757	568	205	572	574	976	6431	
Muskox						13								13
Grizzly Bear												1	1	
Arctic Fox		17	275	124	156	180	5						757	
Wolf	1	3	11		12	25	1						53	
Ringed Seal								7	3				1	6
Canada Geese								154	147					296
Snow Geese								149	201					350
Ptarmigan													349	349
Goose Eggs									2722					2722
Arctic Charr									138				65	203
Lake Trout		1732	545	178	76	157	268	241	32	175	72	87	182	3745
Whitefish sp.				72	50	151	144	135	19		17	27	22	637
Northern Pike													25	25
Arctic Grayling													25	25

¹See Table 1.²Some of the reported harvest of caribou assigned to the Beverly herd for the period January to April may in fact be part of the Wager Bay herd.

Table 9. The estimated harvest by Chesterfield Inlet hunters, expressed as numbers of animals, for the period October 1983 to September 1984.

Species	Category ¹	1983			1984									Sum ²
		Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	
<u>Cari bou</u>														
Kaminuriak	M		1	11	14				34			5		65
	F			6	17		1		6			1		31
	u											2		2
	Subtotal		1	17	31		1		40			8		98
North of Chesterfield	M	12	3											
	F	3	16			1	31	38	23	5	14	10	35	192
	u					23	9	4		1	3	7	5	71
	Subtotal	15	19			6	40	42	73	9	20	17	40	275
Other	M								7					7
	u								1					1
	Subtotal								8					8
	Total	15	20	17	31	50	41	42	71	9	20	25	40	381
Polar Bear			4		1		4							9
Arctic Fox				26	2	3	2	2						35
Wolf			2	9	6	5								22
Ringed Seal		6	5	2			3		7	6	4	3	7	43
Bearded Seal		3										1		4
Walrus							1	4		2				7
Beluga											4	4	4	12
Canada Geese									8					8
Eider									1					1
Canada Goose Eggs												2		2
Duck Eggs									8					8
Fowl Eggs									6					6
Sea Run Arctic Charr									1		15	414	50	480
Lake Trout			43					1	59	26				129
Sculpin sp.									1					1

¹See Table 1.²Even though a high participation ratio has been recorded for this community the estimate of harvest may not be as accurate as this would indicate because the reported harvest of some hunters may not have been complete.

Table 10. The estimated harvest by Coral Harbour hunters, expressed as numbers of animals, for the period October 1983 to September 1984.

Species	Category ¹	1983			1984								Sum	
		Oct. ²	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.		Sept.
Cari bou														
Kaminuriak	u													4
	Subtotal													4
Wager	M							60				9		69
	F							78				3		81
	u							55						55
	Subtotal							193				12		205
Coates	M				16									16
	F				9									9
	u	1		10										11
	Subtotal	1		10	25									36
Southampton	M		4					6	23	7	3	98	39	175
	F							16	21			62	37	136
	u								3			76	?	81
	Subtotal		4					22	47	2	3	236	78	392
	Total	1	4	10	25		4	215	47	2	3	248	78	637
Polar Rear Arctic Fox wolf		20	9	1	4									34
Arctic Hare														529
Ringed Seal									1					1
Bearded Seal		59	87	13	134	101	55	41	57	142	74	20	45	828
Harp Seal		2	4	1	4	7	17	2		5	12	4	10	68
Seal sp. (unknown)											1	13	3	24
Walrus		5			4		1		6		3	11	14	44
Beluga		2	1		2	1					3	33	50	116
Canada Geese									13	101		23		137
Snow Geese					3	21		5	322	5063		30	113	5557
Brant Geese									4	1				5
Geese									3	76				79
Eider		12	3						14	6			18	53
Ptarmigan		134	99	127	158	152	33	283	183				100	1269
Swan									6					6
Other Fowl						2								2
Canada Goose Eggs									71					71
Snow Goose Eggs									10290					10290
Goose Eggs									30					30
Sea Run Arctic Charr		616	366	57	3r-in	12	2	210	108	370	266	690	29	3026
Land-Locked Arctic Charr											12			12
Other Freshwater Fish												19		19
Arctic Cod										150	16	4		170

¹See Table 1.²Complete information on hunter participation was not collected in this community until February. For the period October to January, the figures given in this table are the actual reported harvests from Table 3.

Table 11. The estimated harvest by Eskimo Point hunters, expressed as numbers of animals, for the period October 1983 to September 1984.

Species	Category ¹	1983			1984									
		Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May ²	June	July	Aug.	Sept.	Sum
Cari bou														
Kaminuriak	M	122	44	33	18	46	119	61	6	7	151	57	234	908
	F	195	50	115	157	292	333	255	14	4	17	22	148	1602
	C	16	8					2	1			15	47	99
	U	32	10	5	18	17	13	18	12	9	5	9	31	180
	Total	365	112	153	193	355	465	336	33	20	173	113	461	2779
Moose							3		1					b
Polar Bear		7	12						1					21
Arctic Fox			40	103	117	142	163	55	1					621
Red Fox			2		1	17	9	4						33
Wolf		2	4	5		2	12	30	2					57
Weasel													2	2
Arctic Hare			2					6					1	9
Ringed Seal		110	36		17	29	20	39	36	411	44	13	132	516
Bearded Seal		11	2				2	14	6	2	3	7	9	51
Harbour Seal												1	1	2
Harp Seal		1							2					3
Beluga											35	15		50
Canada Geese									449	191			9	649
Snow Geese									108	14			1	123
Geese									12					12
Eider									1	2			9	12
Old Squaw										8				8
Mallard			1											1
Ptarmi gan		9	68	12	5		20	111	7			1	134	367
Swan									1					1
Canada Goose Eggs									384					384
Snow Goose Eggs									5					5
Goose Eggs										61				61
Sea Run Arctic Charr		78	38	30				2	160	172	1249	608	152	2489
Land-Locked Arctic Charr		7							3					10
Lake Trout		68	159	231			4	183	62	138	8	6	111	970
Whitefish sp.			101	8									45	154
Northern Pike													16	16
Arctic Grayling		366	47					10					16	439
Other Freshwater Fish			19										1	20
Arctic Cod														3
Sculpin sp.														3

¹See Table 1.²Data collection was late for May in this community because of changeover of fieldworkers and the estimate of harvest may not be as accurate for this month as for the rest of the survey period, especially for the various geese and egg harvests.

Table 12. The estimated harvest by Rankin Inlet hunters, expressed as numbers of animals, for the period October 1983 to September 1984.

Species	Category ¹	1983			1984									Sum
		Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	
<u>Caribou</u>														
Kaminuriak	M	51	60	61	79	138	90	113	132	8	64	39	37	872
	F	49	41	69	33	65	61	71	25		1	5	7	421
	c		2	1		4						2		0
	u	6		26		2	22	14	19	13	1	1		104
	Subtotal	106	103	157	112	209	173	198	176	21	66	47	44	1417
<u>North of Chesterfield</u>														
	M					15						1	29	45
	F					21							19	40
	u											7		7
	Subtotal					36						8	48	92
	Total	106	103	157	112	245	173	198	176	21	66	55	92	1504
Polar Bear			3	3		1	1			1				9
Arctic Fox			23	33	19	23	20	10						128
Wolf			1			2	3	3	1					10
Wolverine						1								1
Arctic Hare									4				3	7
Arctic Ground Squirrel										1				1
Ringed Seal		49	23		b		6	4	48	125	116	78	11	414
Bearded Seal		2	1				2	4	3	2	3	1		18
Harbour Seal													1	1
Harp Seal												1		1
Seal sp. (unknown)									4					4
Walrus							1							1
Beluga										2	13	49	5	69
Canada Geese									16	376		9		401
Snow Geese									209	51			41	301
Brant Geese											11			11
Eider						1				2	14	7	3	28
Ptarmigan						12		155	97	13		7	7	291
Sandhill Crane									3					3
Swan									6	1		2		9
Other Fowl											1			
Canada Goose Eggs										94				94
Other Fowl Eggs											22			22
Sea Run Arctic Charr ²		102	443	492	333	86	93	57	47	861	724	1804	45	5087
Land-Locked Arctic Charr									27					27
Lake Trout			54			20		120	232		10	21		458
Whitfish sp.			7					1						8

¹See Table 1.

²The estimate of the sea run Arctic charr harvest is high because 673 charr from the commercial harvest were inadvertently included in the reported harvest from Table 5. Normally commercial landings have not been included in this study.

Table 13. The estimated harvest by Repulse Bay hunters, expressed as numbers of animals, for the period October 1983 to September 1984.

Species	Category*	1983			1984									Sum*
		Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	
<u>Caribou</u>														
Kaminuri ak	M								34					34
	F								6					6
	U"								1					1
	Subtotal								41					41
Wager Bay	M	52	9	17	15	65	39	34	30	91	59	194	94	699
	F	24	11	17	20	47	60	20	6	9	7	79	36	336
	C		3									4		7
	u	19	14		5	12	37	46		10	5	1	16	165
	Subtotal	95	37	34	40	124	136	100	36	110	71	278	146	1207
North of Chesterfield	M								23					23
	Subtotal								23					23
Other	M								7					7
	U								1					1
	Subtotal								8					8
	Total	95	37	34	40	124	136	100	108	110	71	278	146	1279
Polar Bear			8	2		2	2							14
Arctic Fox			97	78	35	20	34	16						280
Red Fox			1			2								3
wolf		4	10	2	2	4	18	2	4					46
Wolverine			3				4	2	1					10
Arctic Hare						4		2						6
Ringed Seal		87	14		8	10	9	16	19	122	126	85	57	553
Bearded Seal		2									5	16	?	25
Harp Seal											%	4		6
Walrus												3	2	5
Beluga											2	12	11	25
Narwhal											14	15	7	31
Canada Geese									4	3				7
Snow Geese									4					4
Eider										5				5
Old Squaw										6				6
Ptarmigan					6		5			4		6	51	92
Sandhill Crane									1					1
Sea Run Arctic Charr		116	564	52					14	655	265	493	9	2168
Land-Locked Arctic Charr		31												31
Lake Trout		2							60					62
Other Freshwater Fish		216												216

¹See Table 1.²There has been a problem in establishing the number of hunters in this community. The actual number of hunters may be less than that used by the harvest study. If so the estimated harvest is slightly high.

Table 14. The estimated harvest by **Whale** Cove hunters, expressed as numbers **of** animals, for the period November 1983 to September 1984.

Species	Category ¹	1983			1984									Sum
		Oct.	Nov.	Dec.	Jan.	² Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	
<u>Cari bou</u>														
Kaminuriak	M		28	10	52	46	52	16	22	18	12	17	21	294
	F		36	15	10	32	77	38	11	10			13	242
	IJ		7	2										9
	Total		71	27	62	78	129	54	33	28	12	17	34	545
Polar Bear			5			2			1					8
Arctic Fox			10	26										36
wolf			1	3		3		2						9
Arctic Hare												3	5	8
Ringed Seal			3		6	5	4	5	21	29	13	6	14	106
Bearded Seal								1		7		2		10
Harbour Seal											3	3		6
Beluga												19	5	24
Canada Geese									11	13				24
Snow Geese									226	273	37		4	540
Eider									9					9
Ptarmigan								5	7					12
Goose Eggs									24					24
Sea Run Arctic Charr			63	30	23			7	2	88	261	467	20	961
Land-Locked Arctic Charr									1					1
lake Trout					17	14	92	93	80	18				314

¹See Table 1.

²No harvest data were collected during October in this community because of changeover of fieldworkers and complete information on hunter participation was not collected until January. For the period November to December the figures given in this table are the actual reported harvests from Table 7.

Table 15. The reported and estimated harvest by Baker Lake hunters expressed as numbers of animals. The mean monthly harvest per hunter and standard deviation about the mean are given.

Species	Category ¹	REPORTED HARVEST ¹ Oct. 1983 - Sept. 1984			ESTIMATED HARVEST ² Oct. 1983 - Sept. 1984		
		Total	Mean	S.D.	Total	Mean	S.D.
Caribou³							
Kaminuriak	M	511	2	1	512	2	1
	F	236	3	2	238	3	2
	U	13	2	1	13	2	1
	Subtotal	760	2	1	763	3	1
Beverly	M	2003	3	2	2017	3	2
	F	1560	3	2	1580	3	2
	u	21	4	2	22	4	2
	Subtotal	3584	3	2	3618	3	2
Wager	M	1216	3	1	1248	3	2
	F	596	3	1	604	3	1
	u	70	3	3	73	3	3
	Subtotal	1882	3	1	1925	3	2
Other	M	63	3	1	63	3	1
	F	58	3	1	58	3	1
	U	4	4	0	4	4	0
	Subtotal	125	3	1	125	3	1
Total	6351	3	2	6431	3	2	
Muskox		13	1	0	13	1	0
Grizzly Bear		1	1	0	1	1	0
Arctic Fox		756	8	6	757	8	6
Wolf		53	2	2	53	2	2
Ringed Seal		6	2	1	6	2	1
Canada Geese		284	4	1	296	4	2
Snow Geese		339	5	2	350	5	2
Ptarmigan		349	9	4	349	9	4
Goose Eggs		2722	27	17	2722	27	17
Arctic Charr		203	6	4	203	6	4
Lake Trout		3706	24	21	3745	24	22
Whitefish sp.		635	9	5	637	9	5
Northern Pike		25	6	2	25	6	2
Arctic Grayling		25	8	2	25	8	2

¹See Table 1.

²See also Tables 1 and 8.

³Some of the reported caribou harvest assigned to the Beverly herd for the period January to April may in fact be part of the Wager Bay herd.

Table 16. The reported and estimated harvest by Chesterfield Inlet hunters expressed as numbers of animals. The mean monthly harvest per hunter and standard deviation about the mean are given.

Species	Category ¹	REPORTED HARVEST ² Ott. 1983 - Sept. 1984			ESTIMATED HARVEST ² Oct. 1983 - Sept. 1984		
		Total ³	Mean	S.D.	Total ³	Mean	S.D.
<u>Cari bou</u>							
Kaminuriak	M	54	7	1	65	2	1
	F	27	?	1	31	2	1
	U	2	2	n	2	2	0
	Subtotal	83	2	1	99	2	1
North of Chesterfield	M	177	3	2	192	3	7
	F	65	2	1	71	2	1
	U	10	3	1	12	3	1
	Subtotal	252	2	2	275	3	2
Other	M	5	3	1	7	3	1
	u	1	1	0	1	1	0
	Subtotal	6	2	1	8	3	1
Total		341	2	2	382	2	2
Polar Bear		9	1	0	9	1	0
Arctic Fox		33	5	4	35	5	5
wolf		20	2	2	22	2	2
Ringed Seal		40	2	1	43	2	1
Bearded Seal		4	1	0	4	1	n
Walrus		7	1	0	7	1	0
Beluga		11	2	1	12	7	1
Canada Geese		7	4	1	R	4	1
Eider		1	1	0	1	1	n
Canada Goose Eggs		2	2	1	2	2	n
Duck Eggs		7	7	n	8	8	0
Other Fowl Eggs		6	6	n	6	6	n
Sea Run Arctic Charr		462	31	30	480	32	3n
Lake Trout		112	6	4	129	7	4
Sculpin sp.		1	1	n	1	1	n

¹See Table 1.

²See also Tables 2 and 9.

³Even though a high participation ratio has been recorded for this community the estimate of harvest may not be as accurate as this would indicate because the reported harvest of some-hunters may not have been complete.

Table 17. The reported and estimated harvest by Coral Harbour hunters expressed as numbers of animals. The mean monthly harvest per hunter and standard deviation about the mean are given.

Species	Category ¹	REPORTED HARVEST ² Oct. 1983 - Sept. 1984			ESTIMATED HARVEST ² Oct. 1983 - Sept. 1984		
		Total ³	Mean	So.	Total ³	Mean	S.D.
<u>Cari bou</u>							
Kaminuriak	U	3	3	0	4	4	0
	Subtotal	3	3	n	4	4	0
Wager	M	56	2	1	69	3	2
	F	67	3	2	81	4	3
	u	46	15	9	55	19	11
	Subtotal	169	4	4	205	4	5
Coates	M	16	5	1	16	5	1
	F	9	9	0	0	9	0
	u	11	6	5	11	6	5
	Subtotal	36	6	3	36	6	3
Southampton	M	121	3	2	175	4	3
	F	94	3	3	136	4	4
	u	56	6	4	81	8	5
	Subtotal	271	3	3	392	5	4
	Total	479	3	3	637	4	4
Polar Bear		34	1	0	34	1	0
Arctic Fox		492	8	10	529	8	11
wolf		1	1	0	1	1	0
Arctic Hare		1	1	0	1	1	0
Ringed Seal		748	3	5	828	4	5
Bearded Seal		57	1	1	68	2	1
Harp Seal		19	1	1	24	7	1
Seal sp. (unknown)		1	1	0	1	1	0
Walrus		33	1	1	44	2	1
Beluga		83	2	1	116	3	2
Canada Geese		125	6	6	137	7	6
Snow Geese		5360	40	82	5557	47	82
Brant Geese		4	1	0	5	7	1
Geese		77	39	37	79	39	37
Eider		42	5	3	53	6	3
Ptarmigan		1117	13	14	1269	15	15
Swan		4	1	0	6	2	1
Other Fowl		2	2	n	2	2	0
Canada Goose Eggs		70	35	15	71	35	15
Snow Goose Eggs		10193	192	339	10290	194	342
Goose Eggs		30	30	0	30	30	0
Sea Run Arctic Charr		2664	22	29	3026	75	31
Land-Locked Arctic Charr		9	9	0	12	12	0
Other Freshwater Fish		13	13	0	19	19	0
Arctic Cod		164	6	5	170	7	5

¹See Table 1.

²See also Tables 3 and 10.

³Complete information on hunter participation was not collected in this community until February 1984.

Table 18. The reported and estimated harvest for Eskimo Point hunters expressed as numbers of animals. The mean monthly harvest per hunter and standard deviation about the mean are given.

Species	Category ¹	REPORTED HARVEST ² Oct. 1983 - Sept. 1984			ESTIMATED HARVEST ² Oct. 1983 - Sept. 1984		
		Total	Mean	S.D.	Total	Mean	S.D.
Caribou							
Kami nuri ak	M	877	2	2	9118	2	2
	F	1568	3	2	1602	3	2
	c	84	2	1	89	2	1
	U	174	2	2	180	3	2
	Total	2703	3	2	2779	3	2
Moose		4	1	0	4	1	0
Polar Bear		21	1	0	21	1	0
Arctic Fox		614	4	3	621	4	3
Red Fox		32	2	1	33	2	1
wolf		57	2	1	57	2	1
Weasel		2	1	0	2	1	0
Arctic Hare		9	1	1	9	1	1
Ringed Seal		498	3	3	516	3	4
Bearded Seal		50	2	1	51	2	1
Harbour Seal		2	1	0	2	1	0
Harp Seal		3	1	0	3	1	0
Beluga		50	2	2	50	2	2
Canada Geese		641	9	1	649	in	11
Snow Geese		122	10	19	123	10	19
Geese		12	12	0	12	12	0
Eider		11	2	1	12	2	1
Old Squaw		8	8	0	8	8	0
Mallard		1	1	0	1	1	0
Ptarmigan		350	9	9	367	9	9
Swan		1	1	0	1	1	0
Canada Goose Eggs		381	42	59	384	43	59
Snow Goose Eggs		5	3	2	5	3	2
Goose Eggs		60	30	0	61	31	0
Sea Run Arctic Charr		2441	15	27	2489	15	27
Land-Locked Arctic Charr		10	5	2	10	5	7
Lake Trout		951	9	17	970	9	17
Whitefish sp.		148	10	8	154	10	8
Northern Pike		14	5	3	16	5	4
Arctic Grayling		425	25	20	439	26	21
Other Freshwater Fish		20	5	4	20	5	4
Arctic Cod		3	3	0	3	3	1
Sculpin sp.		3	3	0	3	3	0

¹See Table 1.

²See also Tables 4 and 11.

Table 19. The reported and estimated harvest for Rankin Inlet hunters expressed as numbers of animals. The mean monthly harvest per hunter and standard deviation about the mean are given.

Species	Category ¹	REPORTED HARVEST ² Oct. 1983 - Sept. 19134			ESTIMATED HARVEST ² Oct. 1983 - Scot. 1984		
		Total	Mean	S.D.	Total	Mean	S.D.
<u>Cari bou</u>							
Kaminuriak	M	236	3	2	872	3	3
	F	368	3	3	427	3	3
	c	8	2	1	9	2	1
	U	92	4	4	104	5	4
	Subtotal	1204	3	2	1412	3	3
North of Chesterfield	M	41	3	2	45	3	7
	F	36	3	2	40	4	3
	U	7	7	0	7	7	0
	Subtotal	84	3	2	92	3	2
	Total	1288	3	2	1504	4	4
Polar Bear		9	1	0	9	1	0
Arctic Fox		116	4	3	128	4	3
Wolf		10	2	1	10	2	1
Wolverine		1	1	0	1	1	0
Arctic Hare		6	2	0	7	2	n
Arctic Ground Squirrel		1	1	n	1	1	0
Ringed Seal		339	3	4	414	4	5
Rearded Seal		15	1	0	18	1	0
Harbour Seal		1	1	0	1	1	0
Harp Seal		1	1	0	1	1	0
Seal sp. (unknown)		3	3	0	4	4	0
Walrus		1	1	0	1	1	0
Beluga		65	2	2	69	3	2
Canada Geese		396	11	15	401	11	15
Snow Geese		237	9	10	301	12	14
Brant Geese		8	8	0	11	11	0
Eider		24	3	3	28	3	4
Ptarmigan		251	14	13	291	16	14
Sandhill Crane		2	1	0	3	1	n
Swan		7	2	1	9	2	1
Other Fowl		1	1	n	1	1	0
Canada Goose Eggs		94	19	12	94	19	12
Other Fowl Eggs		16	8	4	22	11	6
Sea Run Arctic Charr ³		46903	30	62	5087	33	66
Land-Locked Arctic Charr		19	19	0	27	27	0
Lake Trout		369	9	6	458	12	9
Whitefish sp.		7	4	3	8	4	3

¹See Table 1.

²See also Tables 5 and 12.

³673 Arctic charr from the commercial harvest were inadvertently included in the reported harvest. Normally commercial landings have not been included in this study.

Table 20. The reported and estimated harvest for Repulse Bay hunters expressed as numbers of animals. The mean monthly harvest per hunter and standard deviation about the mean are given.

Species	Category ¹	REPORTED HARVEST ² Oct. 1983 - Sept. 1984			ESTIMATED HARVEST ² net. 1983 - Sept. 1984		
		Total	Mean	S.D.	Total ³	Mean	S.D.
Caribou							
Kami nuri ak	M	25	2	1	34	2	1
	F	4	1	0	6	2	1
	U	1	1	0	1	1	0
	Subtotal	30	2	1	41	2	1
Wager Bay	M	461	2	2	699	3	3
	F	208	2	2	336	3	3
	C	5	2	0	7	2	1
	U	99	3	2	165	5	4
Subtotal	773	2	2	1207	3	3	
North of Chesterfield	M	17	2	1	73	3	7
	Subtotal	17	2	1	73	3	7
Other	M	5	3	1	7	3	1
	u	1	1	0	1	1	n
	Subtotal	6	2	1	8	3	1
Total		826	2	2	1279	2	7
Polar Bear		9	1	0	14	2	0
Arctic Fox		160	3	2	280	5	4
Red Fox		2	1	0	3	2	0
Wolf		27	2	1	46	3	1
Wolverine		6	2	1	10	2	1
Arctic Hare		3	1	0	6	2	1
Ringed Seal		363	3	2	553	4	4
Bearded Seal		17	1	1	25	2	1
Harp Seal		4	1	0	6	1	n
Walrus		3	1	n	5	1	0
Beluga		16	3	2	25	4	3
Narwhal		20	1	1	31	2	1
Canada Geese		5	2	1	7	2	1
Snow Geese		3	3	n	4	4	0
Eider		4	2	1	5	3	1
Old Squaw		5	5	0	6	6	0
Ptarmigan		53	5	6	82	8	10
Sandhill Crane		1	1	0	1	1	0
Sea Run Arctic Charr		1552	30	34	2168	42	46
Land-Locked Arctic Charr		18	18	0	31	31	0
Lake Trout		45	5	7	62	7	3
Other Freshwater Fish		125	125	n	216	216	n

¹See Table 1.

²See also Tables 6 and 13.

³There has been a problem in establishing the number of hunters in this community. The actual number may be slightly less than that used by the harvest study. If so the estimated harvest is high.

Table 21. The reported and estimated harvest for Whale Cove hunters expressed as numbers of animals. The mean monthly harvest per hunter and standard deviation about the mean are given.

Species	Category ¹	REPORTED HARVEST* Nov. 1983 - Sept. 1984			ESTIMATED HARVEST ² Nov. 1983 - Sept. 1984		
		Total ³	Mean	S.D.	Total ³	Mean	S.D.
<u>Cari bou</u>							
Kaminuriak	M	249	3	2	294	3	3
	F	231	3	2	242	4	2
	U	9	5	3	9	5	3
	Total	489	3	2	545	3	3
Polar Bear		8	1	0	8	1	0
Arctic Fox		36	9	in	36	9	10
Wolf		9	2	1	9	2	1
Arctic Hare		7	4	2	8	4	1
Ringed Seal		85	2	1	106	3	2
Bearded Seal		7	1	0	10	2	1
Harbour Seal		4	2	0	6	3	0
Beluga		18	3	2	24	4	3
Canada Geese		19	10	1	24	12	1
Snow Geese		415	15	18	540	20	25
Ei der		8	4	2	9	5	2
Ptarmigan		11	6	1	12	6	1
Goose Eggs		21	7	4	24	8	5
Sea Run Arctic Charr		692	23	38	961	32	55
Land-Locked Arctic Charr		1	1	0	1	1	0
Lake Trout		289	12	21	314	13	22

¹See Table 1.

²See also Tables 7 and 14.

³No harvest data were collected in October from this community because of fieldworkers changeover. Complete information on hunter participation was not collected until January 1984.

Table 22. Monthly theoretical kill factors¹ for seven Keewatin communities.

	1983					1984						
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
Baker Lake	1.00	1.07	1.00	1.00	1.00	1.00	1.00	1.08	1.00	1.00	1.00	1.00
Chesterfield Inlet	1.00	1.00	1.04	.14	1.27	1.00	1.00	.35	1.07	1.39	1.03	1.00
Coral Harbour					1.05	1.17	1.21	1.42	1.01	1.35	1.44	1.41
Eskimo Point	1.03	1.01	1.00	.00	1.05	1.01	.01	1.01	1.02	1.01	.02	1.12
Rankin Inlet	1.95	.15	1.02	1.16	1.18	1.02	1.06	1.42	1.00	1.38	1.00	.06
Repulse Bay	1.73	1.42	2.37	1.66	2.04	1.76	1.76	1.36	1.25	1.80	1.29	1.55
Whale Cove				1.92	1.01	1.02	1.00	1.13	1.47	1.48	1.45	1.07

Value by which the reported kill per species is multiplied to arrive at the estimated harvest (see page 15).

Table 23. The harvest by species over the range of age for Baker Lake hunters covering the period 1981 to 1984.

Species	Category ¹	Number of Animals Harvested Per Age Class of Hunter														
		1981-1982					1982-1983					1983-1984				
		1	2	3	4	5 ²	1	2	3	4	5 ²	1	2	3	4	5 ²
Caribou																
Kaminuriak	M	15	304	557	359	91	244	556	263	72	3	137	210	115	46	
	F	5	111	373	244	72	156	445	209	62	38		84	98	16	
	C		1	4												
	u		8	4	7	7					4	9				
	Subtotal	20	424	938	610	170	400	1001	472	134	3	179	303	213	62	
Beverly	M		7	37	22		4	193	432	213	72	25	519	870	436	153
	F		9	53	2	6	4	84	322	90	40	8	339	702	386	125
	c									4						
	u			60								9	3	9		
	Subtotal		16	150	24		8	277	754	307	112	33	857	1575	831	278
Wager	M			5			2	226	402	241	73	4	284	535	306	87
	F							87	124	91	1A	5	142	254	143	42
	c															
	u							3					28	23	6	13
	Subtotal			5			2	316	526	332	87	9	454	822	455	142
Other	M											1	14	37	11	
	F												11	27		9
	c															
	u															
	Subtotal															
	Total	20	440	1093	634	176	10	993	2281	1111	333	46	1525	2764	1523	493
Muskox			1	5			2	8	1			4	4	5		
Arctic Fox			7	64	12	9	52	289	200	28	70	167	414	105		
Wolf				11			3	2		6	8	36	9			
Grizzly Bear																
Ringed Seal									1		1	5				
Ptarmigan				4							26	216	33	28	46	
Canada Geese											101	105	62	16		
Snow Geese											138	147	39	15		
Goose Eggs											11	897	1212	564	33	
Arctic Charr				128							16	115	58	14		
Lake Trout		20	5617	517	3583	1513	162	281	1512	673	538	162	1257	1193	776	
Whitefish sp.							72	204				23	315	102	195	
Northern Pike													16	9		
Arctic Grayling													18	7		
Other Freshwater Fish			80													

¹See Table 1.

²Age classes are as follows:

- 1 = 0-15
- 2 = 16-30
- 3 = 31-45
- 4 = 46-60
- 5 = 61-75

Table 24. The harvest by species over the range of age for Chesterfield Inlet hunters covering the period 1981 to 1984.

Species	Category ¹	Number of Animals Harvested Per Age Class of Hunter														
		1981-1982				1982-1983				1983-1984						
		1	2	3	4	5 ²	1	2	3	4	5 ²	1	2	3	4	5 ²
Cari bou																
Kaminuriak	M		4	5	2	1		10	10			18	12	20	4	
	F		1	3	2			9	13			7	6	12	2	
	C															
	U						4							2		
	Subtotal		5	8	4	1	7	23	23		25	18	34	6		
North of Chesterfield	M	2	15	25	29		56	102	75	19		31	59	82	5	
	F		14	8	5		30	41	66	5		12	19	34		
	C						1									
	U						1	1				2		1		
	Subtotal	2	29	33	34		88	144	141	24		45	78	117	5	
Other	M											2		3		
	F															
	C															
	U											1	7			
	Subtotal											3	7	3		
	Total	2	34	41	33	1	95	167	164	24		73	103	154	11	
Polar Bear		1		1				4	3			1	5	3		
Arctic Fox				4	10		25	90	324	4		5	1	28		
Wolf							1	1	5	1		5	1	12		
Ringed Seal			7	12	18		33	30	49	2	2	4	13	21	2	
Bearded Seal			2									1		3		
Walrus								1	7					3	1	
Beluga			2	5	1				7			1	1	9		
Canada Geese												7				
Snow Geese			6	13			15									
Eider							25		1			1				
Canada Goose Eggs												2				
Duck Eggs												1				
Other Fowl Eggs												6				
Arctic Charr		40			12		20	5	121			176	91	195		
Lake Trout		69	101	41			28	110	98	27		47	30	30	5	
Sculpin sp.												1				

¹See Table 1.²For age classes see Table 23.

Table 25. The harvest by species over the range of age for Coral Harbour hunters covering the period 1981 to 1984.

Species	Category ¹	Number of Animals Harvested Per Age Class of Hunter														
		1981-1982					1982-1983					1983-1984				
		1	2	3	4	5 ²	1	2	3	4	5 ²	1	2	3	4	5 ²
Cari bou																
Kaminuriak	M															
	F															
	C															
	U															
	Subtotal												3			
													3			
Wager	M											25	11	12	8	
	F											34	13	13	7	
	C															
	U															
	Subtotal											24	22			
												83	46	25	15	
Coates	M															
	F															
	C															
	U															
	Subtotal															
		1		2	8		46	34		2				10	6	
		2	2	4	4		25	37		8		9				
	Subtotal						31	2	10			1	10			
		3	2	6	12		102	73	10	10		10	20		6	
Southampton	M															
	F															
	C															
	U															
	Subtotal															
				3	1	9	2	4	3	8		50	39		19	13
						1		1	3			42		29	9	15
	Subtotal											4	37	7	12	
	Total						2		5	7	8	96	105	30	40	
		3	5	7	22		104		78	17	18	192	171	61	55	
Polar Bear						1	5		5	4	5	12	9	9	4	
Arctic Hare						12	23		108	343	177	64	116	269	43	
wolf																1
Arctic Hare									9	9	3					
Ringed Seal		92	42	68	99		124		116	139	45	3	209	235	191	110
Bearded Seal		1	3	4	11		11	6	34	5		25	9	19	4	
Harp Seal		14	18	8	14		21	18	22	3		9	3	2	5	
Harbour Seal										3						
Seal sp. (unknown)																
Walrus						1										
Beluga						1										
Snowy Owl																
Ptarmigan																
Canada Geese																
Snow Geese																
Brant Geese																
Ross's Geese																
Swan																
Old Squaw																
Guillemot																
Eider																
Other Fowl																
Geese																
Snow Goose Eggs																
Canada Goose Eggs																
Goose Eggs																
Brant Eggs																
Arctic Charr																
Lake Trout																
Other Freshwater Fish																
Arctic Cod																

¹See Table 1.²For age classes see Table 23.

Table 26. The harvest by species over the range of age for Eskimo Point hunters covering the period 1981 to 1984.

Species	Category ¹	Number of Animals Harvested Per Age Class of Hunter														
		1981-1982					1982-1983					1983-1984				
		1	2	3	4	5 ²	1	2	3	4	5 ²	1	2	3	4	5 ²
Cari bou																
Kaminuriak	M	2	363	588	325	32	11	229	358	21?	7	3	192	385	285	12
	F	2	232	540	229	18	12	298	467	296	20	2	339	759	438	30
	c	6	52	48	42	2	1	30	36	33			27	27	30	
	u		48	129	63			82	1137	48		4	32	84	52	7
	Subtotal	10	695	1305	659	52	24	639	968	589	27	9	590	1255	805	44
Wager	u								1							
	Subtotal								1							
	Total	10	695	1305	659	52	24	639	969	589	27	9	590	1255	805	44
Moose				1									1	3		
Polar Bear			4	3	1			3	8	3			8	11	2	
Arctic Fox		5	39	84	199	9	433	1008	787	22		110	158	322	24	
Red Fox			8		2			4	21	17	1			6	23	3
wolf			5	11	1			1	19				11	32	14	
Marten								1								
Weasel															2	
Muskrat									1							
Arctic Hare			12	6				6	8	9			1	9		
Ringed Seal		1	116	155	37	1	82	124	26			146	239	112	1	
Bearded Seal			3	15	1		9	13	1			11	31	8		
Harp Seal			1	3			4	2				1	2			
Harbour Seal				2			1	2				1	1			
Seal sp. (unknown)							1									
Reluga			15	45	9		1	24	75	5	1		1?	19	19	
Ptarmi gan		6	56	101	18		42	65	4			100	130	103	17	
Canada Geese			30	14	2	2	378	100	30		23	757	220	136	5	
Snow Geese			319	193	49	21	3	83				19	18	85		
Geese												12				
Goose Eggs							640	300	90		200	131	10	94	11	
Duck Eggs							7	6								
Other Waterfowl Eggs								1								
Other Fowl Eggs								6								
Mallard			2												1	
Eider				1			2	1				6	3	?		
Old Squaw							7					8				
Swan												1				
Snowy Owl				1												
Arctic Charr		4	741	927	317	10	223	1295	423	9	10	522	1378	512	29	
Lake Trout		16	315	954	280	21	217	446	222	8		162	435	335	18	
Whitefish sp.			200	44								41	49	58		
Arctic Grayling			161	28	17		1	11				91	328	6		
Northern Pike				8			50	6	7	20				14		
Sculpin sp.							1					6				
Arctic Cod			90				39	5				3				
Other Freshwater Fish								2					10	10		
Other Saltwater Fish			2					13								

¹See Table 1.

²For age classes see Table 23.

Table 27. The harvest by species over the range of age for Rankin Inlet hunters covering the period 1981 to 1984.

Species	Category ¹	Number of Animals Harvested Per Age Class of Hunter															
		1981-1982					1982-1983					1983-1984					
		1	2	3	4	5 ²	1	2	3	4	5 ²	1	2	3	4	5 ²	
<u>Cari bou</u>																	
Kaminuriak	M		118	264	230	278		69	210	161	96		179	299	218	40	
	F	1	69	169	142	198		47	136	82	94		64	198	100	6	
	C		8	17	10	18		2	5	4	5		2	3	3		
	U		4		12				20	15	16		31	27	30	4	
	Subtotal	1	199	450	394	484	118	371	262	211	276	527	351	511			
<u>North of Chesterfield</u>																	
	M												9	10	16	6	
	F												5	5	21	5	
	C																
	U													7			
	Subtotal											14	22	37	11		
	Total		1199	450	394	484	118	371	262	211	290	549	388	61			
Polar Bear				5	1		4	3	1	1	2	4	3				
Arctic Ground Squirrel											1						
Arctic Fox			3	5	5	15	77	194	224	88	3	58	39	16			
Wolf				5	1	2		25			4	5	1				
Wolverine								3				1					
Arctic Hare				3		5		1		5		5	1				
Ringed Seal			37	139	58	60	32	158	55	47	95	130	106	8			
Bearded Seal				6	1	2	2	7	3	1	3	7	5				
Harbour Seal								1					1				
Harp Seal													1				
Seal sp. (unknown)												3					
Walrus			1				7	3	7	?			1				
Beluga				21	8	3		13	3		19	25	15	6			
Canada Geese			56	144	154	182	8	2	6		91	142	159	4			
Snow Geese			1	8	11	24	30	27	21	13	30	124	63	20			
Brant Geese													8				
Geese		1															
Ptarmigan			7	9	3	4	65	8		12	10	75	80	94	47		
Swan												4			3		
Eider			17	5	2	4				2	1	7	16				
Goose Eggs											52	42					
Other Fowl Eggs											4		12				
Sandhill Crane			1			2							2				
Other Fowl											1						
Arctic Charr		24	1498	2362	2318	1154	250	1632	805	742	482	1697	2275	255			
Lake Trout			20	51	14	19	38	37	63	8	10	60	87	154	48		
Arctic Grayling						10											
Whitefish sp.												6		1			
Other Freshwater Fish			5		40	2	37	14	49								
Other Saltwater Fish				24		52	50										

¹ See Table 1.² For age classes see Table 23.

Table 28. The harvest by species over the range of age for Repulse Bay hunters covering the period 1981 to 1984.

Species	Category ¹	Number of Animals Harvested Per Age Class of Hunter														
		1981-1982					1982-1983					1983-1984				
		1	2	3	4	5 ²	1	2	3	4	5 ²	1	2	3	4	5 ²
Caribou																
Kaminuriak	M								1					15	8	?
	F			1										3	1	
	u													1		
	Subtotal			1					1					19	9	?
Beverly	M		2		1	1										
	F		4													
	Subtotal		6		1	1										
Wager	M		74	120	106	69		103	92	101	64		130	184	82	65
	F		55	84	59	43	1	31	55	53	47		36	115	32	25
	C		1	6	5	7				6	1			1	4	
	U		10			2	19			4			23	27	26	23
	Subtotal		140	210	172	138	1	134	147	164	112		189	327	144	113
North of Chesterfield	M												5	1	9	2
	Subtotal												5	1	9	2
Other	M														3	
	u												2		1	
	Subtotal												2		1	
	Total		146	211	173	139	1	134	148	164	112		215	340	156	115
Polar Bear			2	3	4	1		2	2	3	5		1	8		
Grizzly Bear				2												
Black Bear								1								
Arctic Fox			16	5	9	16		43	14	8	13		34	53	46	97
Red Fox			1												2	
wolf			10	9	2		1	7	5	1	1		8	16	1	?
Wolverine			1	2										6		
Arctic Hare			1	9	1	1			4		1		2		1	
Ringed Seal			145	86	135	29		43	86	48	35		74	168	80	45
Bearded Seal			1	1	8	1		1	5	2	1		7	4	3	3
Harp Seal				1									7	1		1
Walrus				4	6	2		1	1	1	5		1	2		
Reluga			8	2	2	4		8	8	4	4		3	13		
Narwhal			1		1	1		2	2				4	10	3	3
Sandhill Crane															1	
Ptarmigan			15	21	49	8		5	1	1			8	7	3	35
Canada Geese									1					5		
Snow Geese				6	1									3		
Ross' s Geese			1	2							7					
Old Squaw														5		
Guillemot			3													
Eider				3	1			1	9		4			4		
Other Fowl									5							
Arctic Charr			153	367	214	245?		55	321	162	154		210	783	410	167
Lake Trout			37	449	69	138		45	2	4	10		22	18	5	
Arctic Grayling					6											
Other Freshwater Fish																125

¹ See Table 1.² For age classes see Table 23.

Table 29. The harvest by species over the range Of age for Whale Cove hunters covering the period 1981 to 1984.

Species	Category'	Number of Animals Harvested Per Age Class of Hunter														
		1981-1982					1982-1983					1983-1984				
		1	2	3	4	5 ²	1	2	3	4	5 ²	1	2	3	4	5 ²
<u>Cari bou</u>																
Kaminuriak	M	70	133	115	69		28	25	20	29		60	122	33	34	
	F	86	149	77	118		10	51	38	21		53	107	65	6	
	c	8	31	4				2								
	U	3		19			3	3		8		9				
	Subtotal	167	313	215	187		41	81	58	58		122	229	98	40	
Wager Bay	F			4												
	Total	167	313	219	187		41	81	58	58		122	229	98	40	
Polar Bear		3	2		1		1	2	1			5	2			1
Black Bear					1											
Arctic Fox		3		1			31	81	41	22		2	27			7
Red Fox								1								
wolf			1	1	2							4	5			
Arctic Hare		8	4		1					3		5			2	
Ringed Seal		7	54	19	16		3	19	8	4		37		25	14	9
Bearded Seal			3	3			1	1				1	5	1		
Harp Seal			1					1								
Harbour Seal				2				1				2				2
Walrus		1	2	2												
Beluga		1		2								3			6	6
Narwhal					1											
Canada Geese		12	11	38	5								19			
Snow Geese		19	46	1.3	19							306	101	7	1	
Ross's Geese				2												
Eider		1			4							8				
ptarmigan		2	7		2		7	13								11
Goose Eggs												11	10			
Arctic Charr		23	5051	979	159		11	65	1	56		89	292	226	86	
Lake Trout		73	223	105	39		6	54	35	36		75		129	102	30
Northern Pike		1														
Arctic Grayling					2											
Other Freshwater Fish			5		4											
Other Saltwater Fish				3												
Whitefish sp.							12	2	42							

¹ See Table 1.

² For age classes see Table 23.

Table 30. **Data** on the distribution of hunters that were successful in obtaining a harvest expressed as a percentage over the range of age of hunters for the period October 1983 to September 1984.

Community	Range of Ages	DISTRIBUTION OF SUCCESSFUL HUNTERS BY MONTH (%)												Total by Harvest Year	
		Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.		
Baker Lake	0-15	0.0	0.8	0.8	0.8		0.7	0.6	0.6	1.3	0.7	1.2	0.6	3.5	3.2
	16-30	15.6	28.8	29.4	28.5	34.0	33.8	36.1	29.9	30.3	37.2	30.6	33.9	38.7	38.7
	31-45	44.8	40.2	39.5	39.8	36.6	35.7	36.1	39.6	38.8	34.9	38.9	33.9	31.0	31.0
	46-60	27.1	22.0	21.8	20.3	19.6	22.1	20.3	20.8	22.4	19.8	22.3	21.6	18.1	18.1
	61-75	12.5	8.3	8.4	10.6	9.2	7.8	7.0	8.4	7.9	7.0	7.6	7.0	8.9	8.9
Number of successful hunters		96	132	119	123	153	154	158	154	152	172	157	171	248	248
Chesterfield Inlet	0-15	0.0	0.0	0.0	8.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	2.1
	16-30	25.0	15.4	40.0	25.0	50.0	18.8	7.7	56.1	45.5	50.0	28.6	22.2	42.6	42.6
	31-45	12.5	38.5	20.0	25.0	21.4	43.8	46.2	20.0	36.4	16.7	28.6	44.4	27.7	27.7
	46-60	62.5	46.2	40.0	33.3	28.6	31.3	30.8	16.0	18.2	33.3	42.9	33.3	21.3	21.3
	61-75	0.0	0.0	0.0	8.3	0.0	6.3	15.4	8.0	0.0	0.0	0.0	0.0	6.4	6.4
Number of successful hunters		8	13	10	12	14	16	13	25	11	6	14	9	47	47
Coral Harbour	0-15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.2	2.9	0.0	0.0	4.0	4.0
	16-30	34.5	41.7	23.5	29.4	38.2	37.5	43.2	39.0	44.8	26.5	35.6	57.1	46.0	46.0
	31-45	34.5	20.8	35.3	23.5	26.5	28.1	16.2	24.4	24.0	38.7	28.9	16.7	22.2	22.2
	46-60	20.7	16.7	23.5	29.4	29.4	25.1	24.3	19.5	13.5	20.6	20.0	14.3	14.3	14.3
	61-75	10.3	20.8	17.6	17.6	5.9	6.3	16.2	17.1	12.5	11.8	15.6	11.9	13.5	13.5
Number of successful hunters		29	24	17	34	34	32	37	41	96	34	45	42	126	126
Eskimo Point	0-15	2.0	0.0	0.0	0.0	1.1	0.0	0.0	1.2	1.6	0.0	0.0	0.9	1.7	1.7
	16-30	35.0	23.7	15.1	29.6	25.3	27.5	21.3	44.4	4.3	35.4	35.8	35.8	40.9	40.9
	31-45	40.0	40.7	49.1	50.0	41.8	41.3	48.9	28.4	34.9	35.4	41.5	37.6	31.3	31.3
	46-60	20.0	35.6	34.0	18.5	28.6	29.4	28.7	22.2	17.5	26.3	20.8	23.9	21.3	21.3
	61-75	3.0	0.0	1.9	1.9	3.3	1.8	1.1	3.7	4.8	3.0	1.9	1.8	4.8	4.8
Number of successful hunters		100	59	53	54	91	109	94	81	63	99	53	109	230	230
Rankin Inlet	0-15	0.0	0.0	0.0	0.0	0.0	0.0	2.2	0.0	0.0	0.0	0.0	0.0	0.6	0.6
	16-30	13.0	16.1	12.1	29.0	31.9	17.1	28.3	34.5	32.1	28.9	25.5	22.2	34.0	34.0
	31-45	47.8	45.2	51.5	45.2	34.0	43.9	39.1	25.9	41.1	42.2	37.3	44.4	33.3	33.3
	46-60	21.7	29.0	27.3	22.6	25.5	34.1	19.6	25.9	23.7	22.2	29.4	29.6	20.8	20.8
	61-75	17.4	9.7	9.1	3.7	8.5	4.9	10.9	13.8	3.6	6.7	7.8	3.7	11.3	11.3
Number of successful hunters		23	31	33	31	47	41	46	58	56	45	51	27	159	159
Repulse Bay	16-30	28.6	28.0	13.3	31.6	30.0	22.7	31.8	41.5	42.9	29.0	39.6	19.2	45.9	45.9
	31-45	33.3	40.0	46.7	31.6	35.0	45.5	31.8	31.7	33.3	38.7	32.1	42.3	75.9	75.9
	46-60	19.0	16.0	13.3	21.1	25.0	22.7	22.7	17.1	16.7	72.6	17.0	19.2	17.5	17.5
	61-75	19.0	16.0	26.7	15.8	10.0	9.1	13.6	9.8	7.1	9.7	11.3	19.2	10.6	10.6
	Number of successful hunters		21	25	15	19	20	22	22	41	42	31	53	26	85
Whale Cove	16-30	33.3	28.6	30.8	26.3	41.7	40.0	58.6	43.8	44.4	28.6	25.0	48.3	48.3	48.3
	31-45	33.3	57.1	23.1	36.8	33.3	20.0	20.7	18.8		28.6	25.0	20.7	20.7	20.7
	46-60	26.7	14.3	15.4	26.3	16.7	35.0	10.3	25.0	33.3	21.4	25.0	15.5	15.5	15.5
	61-75	6.7	0.0	30.8	10.5	8.3	5.0	10.3	12.5	22.2	21.4	25.0	15.5	15.5	15.5
	Number of successful hunters			15	8	13	19	24	20	29	40	9	14	16	58
Regional total	0-15	0.7	0.3	0.3	0.7	0.5	0.2	0.5	0.7	1.6	0.8	0.3	1.8	0.7	0.7
	16-30	25.6	27.1	32.8	29.0	32.0	29.9	31.3	38.7	37.4	34.6	32.3	34.5	32.6	32.6
	31-45	40.4	38.8	37.6	38.5	36.0	38.2	36.9	31.0	33.9	35.4	36.2	34.3	36.1	36.1
	46-60	23.8	25.8	22.1	21.7	24.3	25.9	23.9	20.3	19.3	22.5	22.7	22.3	22.8	22.8
	61-75	9.4	8.0	7.2	10.1	7.1	5.8	7.4	9.3	7.8	6.8	8.5	7.3	7.8	7.8
Total number of successful hunters		277	299	254	286	378	398	390	429	436	396	386	400	953	953

Table 31. Edible weight values in kilograms for harvested species as calculated from various sources.

Species	Estimated Individual Weight (kg)	Reference
Caribou	48.0	Berger 1977
Moose	199.0	Berger 1977
Muskox	110.0	Riewe 1977
Polar bear	158.8	Native Harvesting Research Committee 1975, 1976a or h
Black bear	45.4	Dome et al. 1982
Grizzly bear	45.4	"
Arctic hare	2.3	Native Harvesting Research Committee 1975, 1976a or h
Ringed seal	14.3	"
Bearded seal	98.4	"
Harbour seal	27.7	"
Harp seal	43.1	"
Walrus	185.1	"
Beluga ²	(M)555.0(F)407.9	Sergeant and Brodie 1969
Narwhal	(M)595.2(F)397.0	Hay (personal communication, DFO, St. John's, NF); Sergeant and Brodie 1969
Canada geese (Hutchinsii)	2.4	Bellrose 1976
Snow geese (Lesser)	1.6	"
Ross' s geese	1.0	"
Eider (Hudson Bay)	1.5	"
Oldsquaw	0.5	"
Mallard	0.7	"
Ptarmigan	0.4	Thomas 1982
Sandhill crane	4.1	Stevens 1965
Snowy owl	1.8	Earhart and Johnson 1970
Swan	6.8	Bellrose 1976
Arctic charr	2.5	Carder 1983
Lake trout	2.4	Bond 1975; Keleher 1964
Whitefish sp.	2.8	"
Northern pike	2.1	MacDonald and Fudge 1979; Keleher 1964
Arctic grayling	0.9	Falk and Gillman 1975; Keleher 1964

¹These references are listed in detail in the reference section of the report.

²"M" means male, "F" means female.

Table 32. Reported and estimated edible weight values (kg) for harvested species for the period **October, 1983** to September, **1984**. Data for October **1983** for Whale Cove were unavailable. For November and December (Whale Cove) and October through January (Coral Harbour) the best estimate was the reported harvest as participation statistics were lacking.

Community and Species	1983-84	1983-84
	Reported Harvest (kg)	Estimated Harvest (kg)
	Total	Total
<u>Baker Lake</u>		
Cari bou	304848	308569
Muskox	1430	1430
Grizzly Bear	45	45
Ringed Seal	86	88
Canada Geese	682	710
Snow Geese	542	561
Ptarmi gan	140	140
Arctic Charr	508	508
Lake Trout	8894	8986
Whit efi sh sp.	1778	1782
Northern Pike	53	53
Arctic Grayling	23	23
Total	319029	322895
<u>Chesterfi el d Inlet</u>		
Cari bou	16368	18295
Polar Bear	1429	1451
Ringed Seal	572	622
Bearded Seal	394	394
Wal rus	1296	1322
Beluga	5297	5923
Canada Geese	17	18
Ei der	2	?
Arctic Charr	1155	1201
Lake Trout	769	310
Total	26799	29528
<u>Coral Harbour</u>		
Cari bou	22992	30495
Polar Bear	5399	5399
Ringed Seal	10696	11839
Bearded Seal	5609	6719
Harp Seal	819	1063
Wal rus	6108	8248
Beluga	39965	55868
Canada Geese	300	328
Snow Geese	8576	8890
Ei der	63	80
Ptarmi gan	447	508
Swan	27	39
Arctic Charr	6660	7565
Total	107661	137041
<u>Eski mo Poi nt</u>		
Cari bou	129744	134096
Moose	796	802
Polar Bear	3335	3390
Arctic Hare	7	7
Ringed Seal	7121	7424
Bearded Seal	4920	5020

Table 32 Cont'd.

Community and Species	1983-84	1983-84
	Reported Harvest (kg)	Estimated Harvest (kg)
	Total	Total
Harbour Seal	55	56
Harp Seal	129	131
Beluga	24075	24407
Canada Geese	1538	1557
Snow Geese	195	197
Eider	17	18
Mallard	1	1
Old Squaw	4	4
Ptarmigan	140	147
Swan	7	7
Arctic Charr	6103	6226
Lake Trout	2282	2333
Whitfish sp.	414	430
Northern Pike	29	33
Arctic Grayling	383	394
Total	181295	186738
<u>Rankin Inlet</u>		
Caribou	61824	71980
Polar Bear	1429	1543
Arctic Hare	9	11
Ringed Seal	4848	5907
Bearded Seal	1476	1770
Harbour Seal	28	30
Harp Seal	43	43
Walrus	185	197
Beluga	31298	33081
Canada Geese	950	962
Snow Geese	379	482
Eider	36	42
Ptarmigan	100	117
Sandhill Crane	8	12
Swan	48	59
Arctic Charr	11725	12712
Lake Trout	886	1099
Whitfish sp.	20	22
Total	115292	130068
<u>Repulse Bay</u>		
Caribou	39648	61221
Polar Bear	1429	2338
Arctic Hare	5	9
Ringed Seal	5248	7890
Bearded Seal	1673	2382
Harp Seal	172	245
Walrus	555	766
Beluga	7704	11904
Narwhal	9922	15401
Canada Geese	12	16
Snow Geese	5	7
Eider	6	8
Old Squaw	3	3
Ptarmigan	21	33
Sandhill Crane	4	6
Arctic Charr	3880	5419
Lake Trout	108	147
Total	70395	107795

Table 32 Cont'd.

Community and Species	1983-84	1983-84
	Reported Harvest (kg)	Estimated Harvest (kg)
	Total	Total
<u>Whale Cove</u>		
Caribou	23472	26209
Polar Bear	1270	1296
Arctic Hare	16	19
Ringed Seal	1216	1528
Bearded Seal	689	964
Harbour Seal	111	162
Reluga	8667	11660
Canada Geese	46	59
Snow Geese	664	865
Eider	12	14
Ptarmigan	4	5
Arctic Charr	1730	2406
Lake Trout	694	753
Total	38591	45940

Table 33. Reported and estimated edible weight values for four major groups of animals harvested by Keewatin communities, October, 1983 to September, 1984.

Period	Raker Lake (reported edible wt)					Raker Lake (estimated edible wt)				
	Total Edible Weight (kg)	Weight (kg) per Category (bracketed figures are % of total)				Total Edible Weight (kg)	Weight (kg) per Category (bracketed figures are % of total)			
		Terrestrial	Marine	Fowl	Fish		Terrestrial	Marine	Fowl	Fish
1983										
Oct	17309 ¹	13152 (76.0)			4157 (24.0)	17309 ¹	13152 (76.0)			4157 (24.0)
Nov	24454	23232 (95.0)			1222 (5.0)	24454	23232 (95.0)			1222 (5.0)
Dec	16085	15456 (96.1)			629 (3.9)	16085	15456 (96.1)			629 (3.9)
1984										
Jan	18322	18000 (98.2)			322 (1.8)	18322	18000 (98.2)			322 (1.8)
Feb	29264	28464 (97.3)			800 (2.7)	29264	28464 (97.3)			800 (2.7)
Mar	38428	37382 (97.3)			1046 (2.7)	38428	37382 (97.3)			1046 (2.7)
Apr	37292	36336 (97.4)			956 (2.6)	37292	36136 (97.4)			1156 (3.1)
May	25667	24960 (97.2)	29 (.1)	562 (2.2)	117 (.5)	27821	27054 (97.2)	31 (.1)	609 (2.2)	127 (.5)
June	11310	9840 (87.0)	43 (.4)	662 (5.9)	765 (6.7)	11310	9840 (87.0)	43 (.4)	662 (5.9)	765 (6.8)
July	25276	25056 (99.1)			220 (.9)	25276	25056 (99.1)			220 (.9)
Aug	27836	27552 (99.0)			284 (1.0)	27836	27552 (99.0)			284 (1.0)
Sept	47783	46893 (98.1)	14 (.1)	140 (.3)	736 (1.5)	47783	46893 (98.1)	14 (.1)	140 (.3)	736 (1.5)
Total	319028	306323 (96.0)	85.8 (.1)	1364 (.4)	11255 (3.5)	322893	310044 (96.0)	88 (.1)	1411 (.4)	11350 (3.5)

¹In this table there are two situations where reported and estimated values are equal.

- (a) The theoretical kill factor (Table 22) is the value by which the reported kill per species is multiplied to arrive at the estimated harvest. In cases where this value is one then 100% of the hunters have been interviewed and the reported and estimated harvests are equal.
- (b) For the communities of Coral Harbour over the period October 1983 to January 1984 and Whale Cove over the period November to December 1983, no data was collected on hunter participation. Consequently, no meaningful theoretical kill factors could be calculated. In these cases the best estimate of harvest was taken to be the reported harvest.

Table 33 Cont'd.

Period	Chesterfield Inlet (reported edible wt.)					Chesterfield Inlet (estimated edible wt.)				
	Total Edible Weight (kg)	Weight (kg) per Category (bracketed figures are % of total)				Total Edible Weight (kg)	Weight (kg) per Category (bracketed figures are % of total)			
		Terrestrial	Marine	Fowl	Fish		Terrestrial	Marine	Fowl	Fish
1983										
Oct.	1101	720 (65.4)	381 (34.6)			1101	720 (65.4)	381 (34.6)		
Nov	1770	1595 (90.1)	72 (4.0)		103 (5.8)	1770	1595 (90.1)	72 (4.0)		103 (5.8)
Dec	845	816 (96.6)	29 (3.4)			878	849 (96.6)	30 (3.4)		
1984										
Jan	1455	1455 (100.0)				1659	1659 (100.0)			
Feb	1872	1872 (100.0)				2370	2370 (100.0)			
Mar	2831	2603 (91.9)	228 (8.1)			2831	2603 (91.9)	228 (8.1)		
Apr	2759	2016 (73.1)	740 (26.8)		2 (.1)	2759	2016 (73.1)	740 (26.8)		2 (.1)
May	2676	2496 (93.3)	72 (7.7)		108 (4.0)	3612	3370 (93.3)	97 (2.7)		146 (4.0)
June	964	432 (44.8)	456 (47.3)	18 (1.9)	58 (6.0)	1031	462 (44.8)	488 (47.3)	20 (1.9)	62 (6.0)
July	2187	672 (30.7)	1487 (68.0)		28 (1.3)	3035	933 (30.7)	2065 (68.0)		38 (1.3)
Aug	4161	1200 (28.8)	1969 (47.2)		1000 (24.0)	4111	1741 (28.8)	2036 (47.2)		1034 (24.0)
Sept	4170	1920 (46.0)	2125 (51.0)		125 (3.0)	4170	1920 (46.0)	2125 (51.0)		125 (3.0)
Total	26791	17797 (66.4)	7558 (28.2)	18 (.1)	1424 (5.3)	29527	19737 (66.8)	8260 (28.0)	20 (.1)	1510 (5.1)

Table 33 Cont'd.

Period	Coral Harbour (reported edible wt)						Coral Harbour (estimated edible wt)						
	Total Edible Weight (kg)			Weight (kg) per Category (bracketed figures are % of total)			Total Edible Weight (kg)			Weight (kg) per Category (bracketed figures are % of total)			
	Terrestrial	Marine	Fish	Terrestrial	Marine	Fish	Terrestrial	Marine	Fish	Terrestrial	Marine	Fish	
1983													
Oct	7765	3224 (41.5)	2929 (37.7)	72 (.9)	1540 (19.8)	7765 ¹	3224 (41.5)	2929 (37.7)	72 (.9)	1540 (19.8)	3224 (41.5)	2929 (37.7)	72 (.9)
Nov	4700	1621 (34.5)	2119 (45.1)	44 (.9)	915 (19.5)	4700	1621 (34.5)	2119 (45.1)	44 (.9)	915 (19.5)	1621 (34.5)	2119 (45.1)	44 (.9)
Dec	1116	639 (57.2)	284 (25.5)	51 (4.6)	143 (12.8)	1116	639 (57.2)	284 (25.5)	51 (4.6)	143 (12.8)	639 (57.2)	284 (25.5)	51 (4.6)
1984													
Jan	6839	1835 (26.8)	4186 (61.2)	68 (1.0)	750 (11.0)	6839	1835 (26.8)	4186 (61.2)	68 (1.0)	750 (11.0)	1835 (26.8)	4186 (61.2)	68 (1.0)
Feb	2804		2687 (95.8)	90 (3.2)	28 (1.0)	2944		2687 (95.8)	90 (3.2)	28 (1.0)	2821 (95.8)	95 (3.2)	29 (1.0)
Mar	2395	144 (6.0)	2235 (93.3)	11 (.5)	5 (.2)	2790	169 (6.0)	2604 (93.3)	13 (.5)	6 (.2)	169 (6.0)	2604 (93.3)	13 (.5)
Apr	9810	8592 (87.6)	683 (7.0)	100 (1.0)	435 (4.4)	11822	8353 (87.6)	823 (7.0)	121 (1.0)	524 (4.4)	8353 (87.6)	823 (7.0)	121 (1.0)
May	3565	1584 (44.4)	1312 (36.8)	479 (13.4)	190 (5.3)	5052	2245 (44.4)	1860 (36.8)	678 (13.4)	269 (5.3)	2245 (44.4)	1860 (36.8)	678 (13.4)
June	13239	96 (.7)	3953 (29.9)	8273 (62.5)	918 (6.9)	13364	97 (.7)	3989 (29.9)	8351 (62.5)	926 (6.9)	97 (.7)	3989 (29.9)	8351 (62.5)
July	14216	96 (.7)	13627 (95.9)		493 (3.5)	1920	130 (.7)	18424 (95.9)		666 (3.5)	130 (.7)	18424 (95.9)	
Aug	28745	8256 (28.7)	19217 (66.9)	72 (.3)	1200 (4.2)	41306	1864 (28.7)	27614 (66.9)	104 (.3)	1724 (4.2)	1864 (28.7)	27614 (66.9)	104 (.3)
Sept	12468	2304 (18.5)	9965 (79.9)	153 (1.2)	45 (.4)	20123	3719 (18.5)	16084 (79.9)	247 (1.2)	73 (.4)	3719 (18.5)	16084 (79.9)	247 (1.2)
Total	10766	28391 (26.4)	63197 (58.7)	9413 (8.7)	6660 (6.2)	137039	35894 (26.2)	83737 (61.1)	9843 (7.2)	7565 (5.5)	35894 (26.2)	83737 (61.1)	9843 (7.2)

Table 33 Cont'd.

Per cent	Total Edible Weight (kg)		Weight (kg) per Category (bracketed figures are % of total)			Total Edible Weight (kg)	Weight (kg) per Category (bracketed figures are % of total)			
	1983	1984	1983				1984			
			Terrestrial	Marine	Fish		Terrestrial	Marine	Fish	
Oct	22074	18647 (84.5)	2735 (12.4)	4	688 (3.1)	21432	18104 (84.5)	2656 (12.4)	4	668 (3.1)
Nov	8907	7359 (82.6)	719 (8.1)	28 (.3)	801 (9.0)	8819	7286 (82.6)	712 (8.1)	28 (.3)	793 (9.0)
Dec	8001	7344 (91.8)		5 (.1)	652 (8.1)	8001	7344 (91.8)		5 (.1)	652 (8.1)
1984										
Jan	9509	9264 (97.4)	243 (2.6)	2		9509	9264 (97.4)	243 (2.6)	2	
Feb	17573	17154 (97.6)	420 (2.4)	8	10	16768	16368 (97.6)	400 (2.4)	8	10
Mar	23765	23260 (97.9)	487 (2.0)	44 (.2)	455 (2.4)	23577	23076 (97.9)	483 (2.0)	44 (.2)	451 (2.4)
Apr	18676	16224 (86.9)	1953 (10.5)	1260 (25.4)	551 (11.1)	18510	16080 (86.9)	1935 (10.5)	1250 (25.4)	546 (11.1)
May	4969	1957 (39.4)	1201 (24.2)	489 (16.3)	762 (25.4)	4929	1942 (1201)	1191 (24.2)	481 (16.3)	749 (25.4)
June	2994	976 (32.6)	767 (25.6)			2945	960 (32.6)	755 (25.6)		
July	29485	8378 (28.4)	7965 (60.9)	90 (.3)	1534 (10.3)	29223	8304 (28.4)	17805 (60.9)	80 (.3)	1497 (10.3)
Aug	14869	5510 (37.1)	7824 (52.6)			14506	5376 (37.1)	7633 (52.6)		
Sept	25918	2221 (85.7)	2786 (10.8)			23079	19778 (85.7)	2489 (10.8)		
Total	186740	138295 (74.1)	37099 (19.9)	1930 (1.0)	9415 (5.0)	181298	133882 (73.9)	36302 (20.0)	902 (1.0)	9212 (5.1)

Table 33 Cont'd.

Period	Rankin Inlet (reported edible wt.)					Rankin Inlet (estimated edible wt.)				
	Total Edible Weight (kg)	Weight (kg) per Category (bracketed figures are % of total)				Total Edible Weight (kg)	Weight (kg) per Category (bracketed figures are % of total)			
		Terrestrial	Marine	Fowl	Fish		Terrestrial	Marine	Fowl	Fish
1983										
Ott	3178	2592 (81.6)	456 (14.3)		130 (4.1)	6197	5054 (81.6)	889 (14.3)		254 (4.1)
Nnv	6274	4796 (76.4)	384 (6.1)	2 (.1)	1092 (17.4)	7216	5516 (76.4)	442 (6.1)	2	1256 (17.4)
Dec	9073	7868 (86.7)			1205 (13.3)	9254	8026 (86.7)			1229 (13.3)
1984										
Jan	5371	4608 (85.8)	43 (.8)		720 (13.4)	6209	5327 (85.8)	50 (.8)		832 (13.4)
Feb	10322	10095 (97.8)		4	223 (2.2)	12211	11942 (97.8)		5	264 (7.2)
Mar	8782	8271 (94.2)	283 (3.2)	2	228 (2.6)	8958	8436 (94.2)	288 (3.2)	2	232 (2.6)
Apr	9933	8832 (88.9)	636 (6.4)	58 (.6)	407 (4.1)	10578	9446 (88.9)	677 (6.4)	62 (.6)	433 (4.1)
May	7438	5954 (80.1)	683 (9.2)	324 (4.4)	476 (6.4)	10554	8449 (80.1)	969 (9.7)	464 (4.4)	676 (6.4)
June	7266	1167 (16.1)	2947 (40.6)	999 (13.7)	2153 (29.6)	7266	1167 (16.1)	2947 (40.6)	999 (13.7)	2153 (29.6)
July	9382	2304 (24.6)	5732 (61.1)	15 (.2)	1332 (14.2)	12910	3170 (24.6)	7887 (61.1)	21 (.2)	1833 (14.2)
Aug	31384	2640 (8.4)	24135 (76.9)	49 (.2)	4560 (14.5)	31384	2640 (8.4)	24135 (76.9)	49 (.2)	4560 (14.5)
Sept	6889	4135 (60.0)	2578 (37.4)	70 (1.0)	105 (1.5)	7329	4444 (60.0)	2743 (37.4)	74 (1.0)	112 (1.5)
Total	115292	63262 (54.9)	37877 (32.9)	1552 (1.3)	12630 (11.0)	130066	73533 (56.5)	41028 (31.5)	1673 (1.3)	13833 (10.6)

Table 33 Cont'd.

Period	Repulse Ray (reported edible wt)					Repulse Ray (estimated edible wt)				
	Total Edible Weight (kg)	Weight (kg) per Category (bracketed figures are % of total)				Total Edible Weight (kg)	Weight (kg) per Category (bracketed figures are % of total)			
		Terrestrial	Marine	Fowl	Fish		Terrestrial	Marine	Fowl	Fish
1983										
Oct	3623	2640 (72.9)	813 (22.4)		170 (4.7)	6261	4562 (72.9)	1406 (22.4)		294 (4.7)
Nov	3334	2201 (66.0)	143 (4.3)		990 (29.7)	4751	3136 (66.0)	204 (4.3)		1411 (29.7)
Dec	886	831 (93.8)			55 (6.2)	2096	1966 (93.8)			130 (6.2)
1984										
Jan	1224	1152 (94.2)	72 (5.8)			2035	1916 (94.2)	119 (5.8)		
Feb	3164	3091 (97.7)	72 (2.3)	1		6471	6322 (97.7)	146 (2.3)	3	
Mar	3926	3855 (98.2)	72 (1.8)			6922	6796 (98.2)	126 (1.8)		
Apr	2818	2688 (95.4)	129 (4.6)	1		4968	4739 (95.4)	227 (4.6)	2	
May	4139	3792 (91.6)	200 (4.8)	16 (.4)	131 (3.2)	5612	5142 (91.6)	272 (4.8)	22 (.4)	177 (3.2)
June	6885	4176 (60.7)	1387 (20.1)	15 (.2)	1308 (19.0)	8620	5228 (60.7)	1737 (20.1)	18 (.2)	1637 (19.0)
July	8077	1920 (23.8)	5790 (71.7)		368 (4.5)	14539	3456 (23.8)	10421 (71.7)		662 (4.5)
Aug	23097	10224 (44.3)	11919 (51.6)	2	953 (4.1)	31226	13313 (42.6)	16679 (53.4)	3	1233 (3.9)
sPpt	9222	4512 (48.9)	4679 (50.7)	16 (.2)	15 (.2)	142941	6994 (48.9)	7253 (50.7)	24 (.2)	23 (.2)
Total	70395	41082 (58.4)	25275 (35.9)	51 (.1)	3988 (5.7)	107794	63569 (59.0)	38588 (35.8)	72 (.1)	5567 (5.2)

P'--

Table 33 Cont. 'd.

Period	Whale Cove (reported edible wt)					Whale Cove (estimated edible wt)				
	Total Edible Weight (kg)	Weight (kg) per Category (bracketed figures are % of total)				Total Edible Weight (kg)	Weight (kg) per Category (bracketed figures are % of total)			
		Terrestrial	Marine	Fowl	Fish		Terrestrial	Marine	Fowl	Fish
1983										
Nov	44021	4202 (9.4)	43 (1.0)		158 (3.6)	44021	4202 (95.4)	43 (1.0)		158 (3.6)
Dec	1371	1296 (94.5)			75 (5.5)	1371	1296 (94.5)			75 (5.5)
1984										
Jan	1631	1536 (94.2)	43 (2.6)		52 (3.2)	3136	2954 (94.2)	83 (2.6)		99 (3.2)
Feb	3849	3744 (97.3)	72 (1.9)		34 (.9)	3907	3800 (97.3)	73 (1.9)		34 (.9)
Mar	6687	6414 (95.9)	57 (.9)		216 (3.2)	6794	6516 (95.9)	58 (.9)		220 (3.2)
Apr	3005	2592 (86.3)	170 (5.7)	2 (.1)	241 (8.0)	3005	2592 (86.3)	170 (5.7)	2 (.1)	241 (8.0)
May	2356	1551 (65.8)	272 (11.5)	358 (15.2)	175 (7.4)	2665	1754 (65.8)	307 (11.5)	405 (15.2)	199 (7.4)
June	2188	912 (41.7)	778 (35.6)	319 (14.6)	179 (8.2)	3216	1341 (41.7)	1144 (35.6)	469 (14.6)	263 (8.2)
July	1051	3134 (36.6)	184 (17.5)	40 (3.8)	443 (42.1)	1552	567 (36.6)	272 (17.5)	59 (3.8)	654 (42.1)
Aug	7856	581 (7.4)	6471 (82.4)		805 (10.2)	11391	842 (7.4)	9382 (82.4)		1167 (10.2)
Sept	4195	1548 (36.9)	2593 (61.8)	6 (.2)	48 (1.1)	4501	1661 (36.9)	2783 (61.8)	7 (.2)	51 (1.1)
Total	38590	24759 (64.2)	10682 (27.7)	726 (1.9)	2424 (6.3)	45940	27524 (59.9)	14314 (31.2)	743 (1.6)	3159 (6.9)

Table 34. Prices of commodities sold in each Keewatin community compared to country foods sold in Frobisher Bay (new name Iqaluit). Prices were taken January 1985.

Community	Retail Price Per Kilogram in \$						
	Pork Chops	Round Steak	Chicken	Charr	Muktah	Caribou	Seal
Baker Lake	6.78	12.10	6.44				
Chesterfield Inlet	7.04	12.36	6.70				
Coral Harbour	7.94	13.26	7.60				
Eskimo Point	6.49	11.81	6.15	4.50(w) ¹			
Rankin Inlet	6.63	11.95	6.29	9.65(f) ¹			
Repulse Bay	8.02	13.34	7.68	3.30(w)			
Whale Cove	9.91	10.57	6.28				
Frobisher Bay				6.61(cw)	7.17	9.92	5.51

¹w = whole fish
f = fillets

Table 35. The harvest of caribou in the Keewatin region for the period October 1983 to September 1984.

Community	Reported Harvest	Male	Female	Cal ves	Unknown	\bar{x} Theoretical Kill Factor	Estimated Harvest	Male	Female	Cal ves	Unknown	Reported Kill/Hunter \pm S.D.
<u>Baker Lake</u>												
Kaminuriak	760	511	236		13		763	512	238		13	2±1
Beverly	3584	2003	1560		21		3619	2017	1580		22	3±2
Wager	1882	1216	596		70		1925	1248	604		73	3±1
Other	125	63	58		4		125	63	58		4	3±1
Total	6351	3793	2450		108	1.01	6432	3840	2480		112	3±2
<u>Chesterfield Inlet</u>												
Kaminuriak	83	54	27		2		99	66	31		2	2±1
N. of Chesterfield	252	177	65		10		275	192	71		12	2±2
Other	6	5			1		8	7			1	2±1
Total	341	236	92		13	1.11	382	265	102		15	2±2
<u>Coral Harbour</u>												
Kaminuriak	3				3		4					3±0
Wager	169	56	67		46		205	69	81		5	4±4
Coates	36	16	9		11		36	16	9		11	6±3
Southampton	271	121	94		56		391	174	136		81	3±3
Total	479	193	170		116	(1.28)	636	259	226		151	4±4
<u>Eskimo Point</u>												
Kaminuriak	2459	768	1568	74	174	1.02	2708	909	1603	89	179	3±2
<u>Rankin Inlet</u>												
Kaminuriak	1204	736	368	8	92		1409	870	427	9	103	4±4
N. of Chesterfield	84	41	36		7		93	45	41		7	3±2
Total	1288	777	404	8	99	1.20	1502	915	468	9	110	4±4
<u>Repulse Bay</u>												
Kaminuriak	30	25	4		1		41	34	6		1	2±1
Wager Bay	773	461	208	5	99		1207	699	335	7	166	2±2
N. of Chesterfield	17	17					23	23				2±1
Other	6	5			1		8	7			1	2±1
Total	826	508	212	5	101	1.70	1279	763	341	7	168	2±2

Table 35 Cont'd.

Community	Reported Harvest	Male	Female	Calves	Unknown	\bar{x} Theoretical Kill Factor	Estimated Harvest	Male	Female	Calves	Unknown	Reported Kill/Hunter \pm S. D.
Whale Cove												
Kaminuriak	489	249	231		9	(1.28)	545	294	242		9	3\pm2
All Communities												
Kaminuriak	5272	2452	2434	92	294		5641	2685	2547	98	311	
Beverly	3584	2003	1560		21		3619	2017	1580		22	
N. of Chesterfield	353	235	101		17		391	260	112		19	
Wager Bay	2824	1733	871	5	215		3337	2016	1020	7	294	
Coates	36	16	9		11		36	16			11	
Southampton	271	121	94		56		391	174	13:		81	
Other	137	73	58		6		141	77	58		6	
Sum.	12477	6633	5127	97	620		13556	7245	5462	105	744	

Table 36. **Age** distribution of hunters for the seven **Keewatin region** communities for the period October 1983 to September 1984.

Community	Percentage of Hunters Per Age Category						Total Known Hunters
	0-15	16-30	31-45	46-60	61-75	76.1 ¹	
Raker Lake	3.1	38.0	30.2	18.2	7.1	3.4	324
Chesterfield Inlet	1.1	48.9	23.9	17.0	5.7	3.4	88
Coral Harbour	4.1	39.1	23.7	12.4	7.7	13.0	169
Eskimo Point	2.0	43.0	31.7	18.4	4.1	.7	293
Rankin Inlet	.6	30.6	24.9	12.3	4.3	27.4	350
Repulse Bay	1.5	38.6	26.5	13.6	3.0	16.7	132
Whale Cove	.9	30.7	19.3	13.2	8.8	27.2	114
Total hunters for the Keewatin District	2.0	37.5	26.9	15.3	5.6	12.7	1470

¹This category includes hunters of unknown ages. There are only eight hunters of known age in this group.

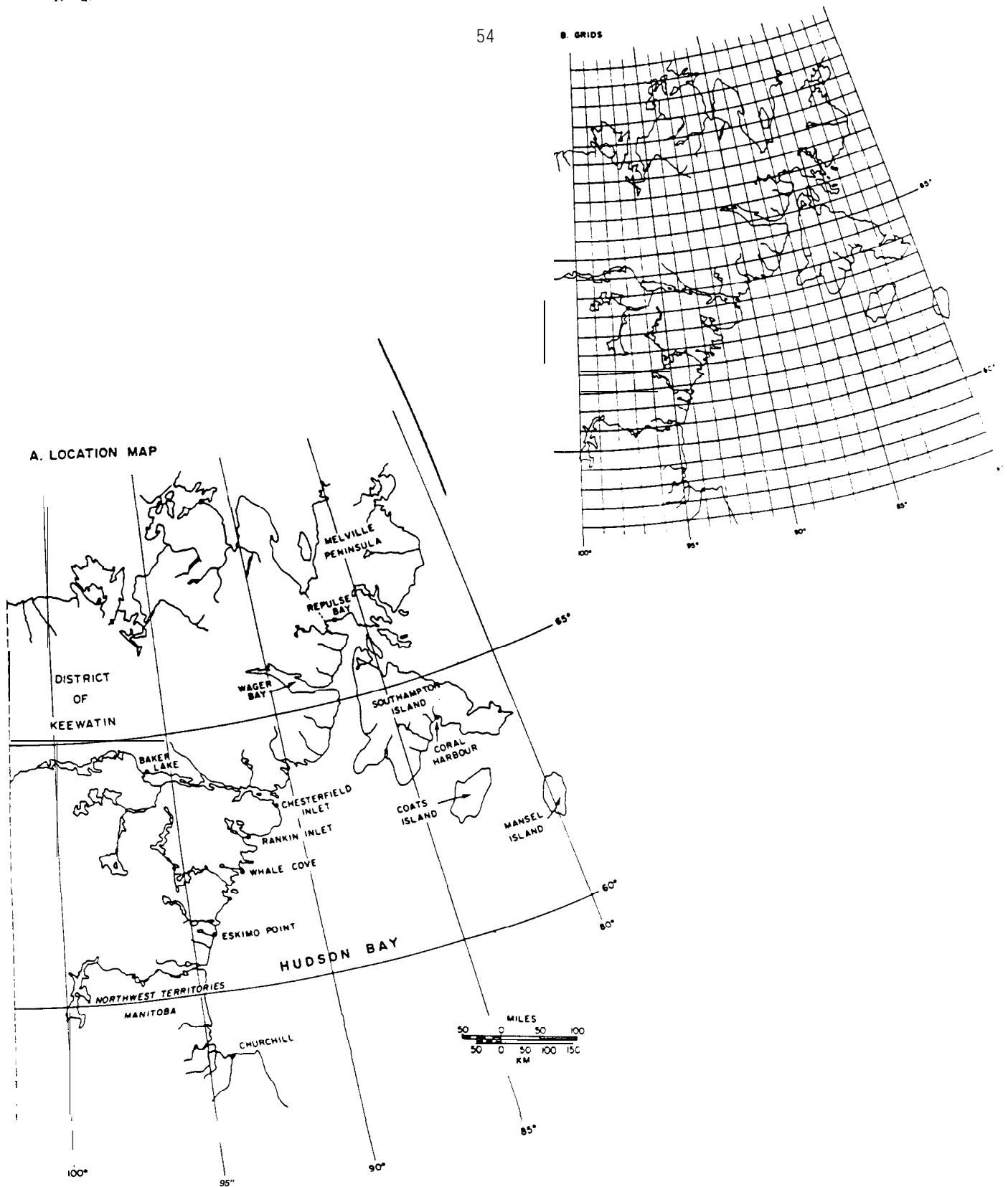


Fig. 1. Map of Keewatin District showing the seven communities surveyed during the harvest study and the zonal grid used to locate kills.

ᐱᓕᓕᓐᓂᓐ
ᓂᓐᓂᓐᓂᓐᓂᓐᓂᓐᓂᓐ
1984
ᓂᓐᓂᓐᓂᓐᓂᓐᓂᓐᓂᓐ
ᓂᓐᓂᓐᓂᓐᓂᓐᓂᓐᓂᓐ

Keewatin
Wildlife Federation
1984
Wildlife Harvest
Study

ᐱᓕᓕᓐᓂᓐ
ᓂᓐᓂᓐᓂᓐᓂᓐᓂᓐᓂᓐ
Field Diary

Species / Species	June / June		Date
	M	F	
caribou, Kamouriat ᐱᓕᓕᓐᓂᓐ			
Beverly ᐱᓕᓕᓐᓂᓐ			
Wagner ᐱᓕᓕᓐᓂᓐ			
other ᐱᓕᓕᓐᓂᓐ			
polar bear ᐱᓕᓕᓐᓂᓐ			
grizzly ᐱᓕᓕᓐᓂᓐ			
muskrat ᐱᓕᓕᓐᓂᓐ			
moose ᐱᓕᓕᓐᓂᓐ			
other ᐱᓕᓕᓐᓂᓐ			
wolverine ᐱᓕᓕᓐᓂᓐ			
lynx ᐱᓕᓕᓐᓂᓐ			
arctic hare ᐱᓕᓕᓐᓂᓐ			
arctic fox ᐱᓕᓕᓐᓂᓐ			
red fox ᐱᓕᓕᓐᓂᓐ			
other ᐱᓕᓕᓐᓂᓐ			
ringed seal ᐱᓕᓕᓐᓂᓐ			
bearded seal ᐱᓕᓕᓐᓂᓐ			
harp seal ᐱᓕᓕᓐᓂᓐ			
harbour seal ᐱᓕᓕᓐᓂᓐ			
walrus ᐱᓕᓕᓐᓂᓐ			
narwhal ᐱᓕᓕᓐᓂᓐ			
beluga ᐱᓕᓕᓐᓂᓐ			
bowhead ᐱᓕᓕᓐᓂᓐ			
other mammals			

Fig. 2. Example of the field diary in Inuktitut and English provided to hunters for the calendar year 1984.

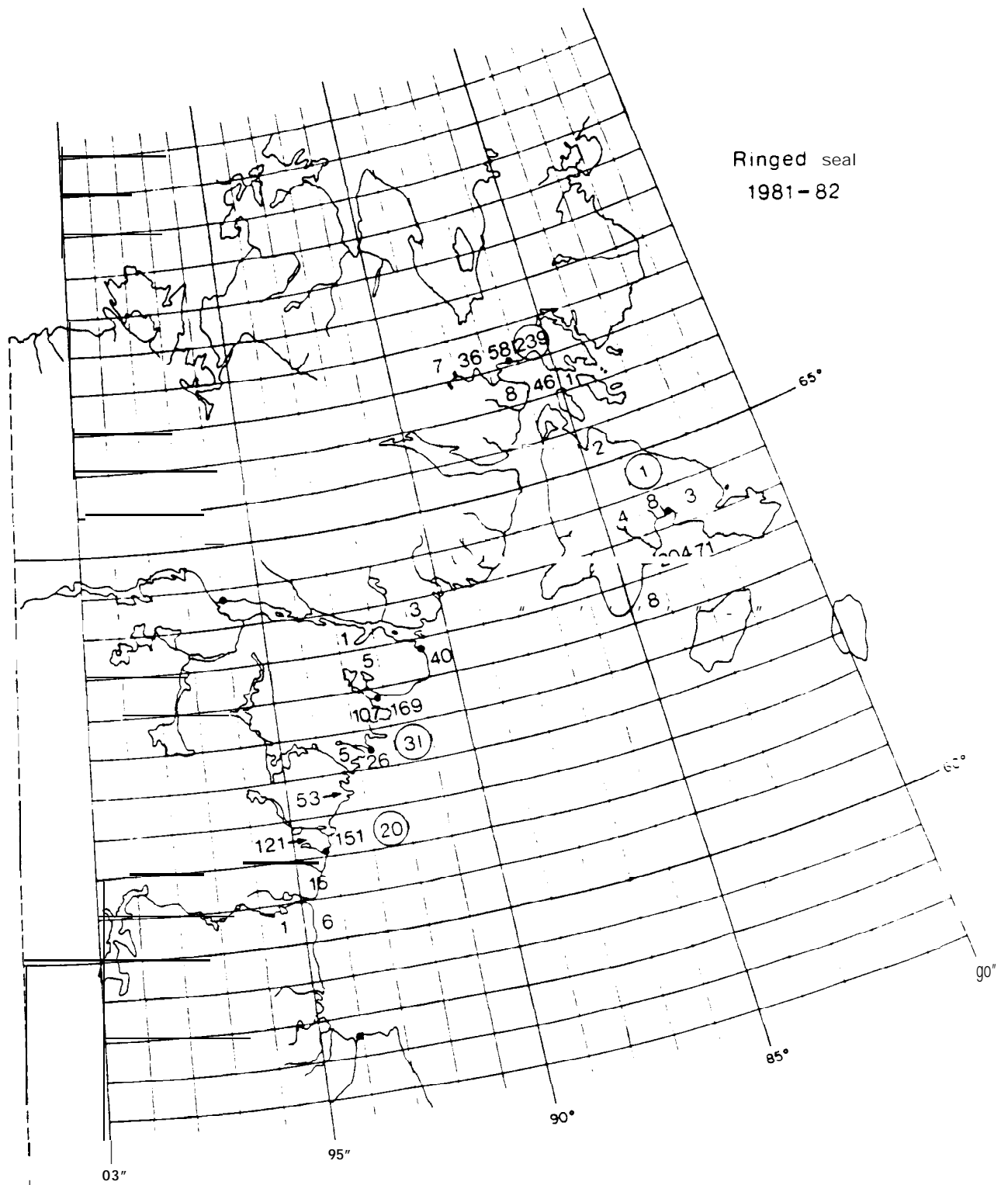


Fig. 3. Zone map for the harvest years, October 1981 through to September 1984, showing the harvest of ringed seal by area in the Keewatin District. Numbers enclosed by a circle were not identified by zone but were reported in the community harvest.

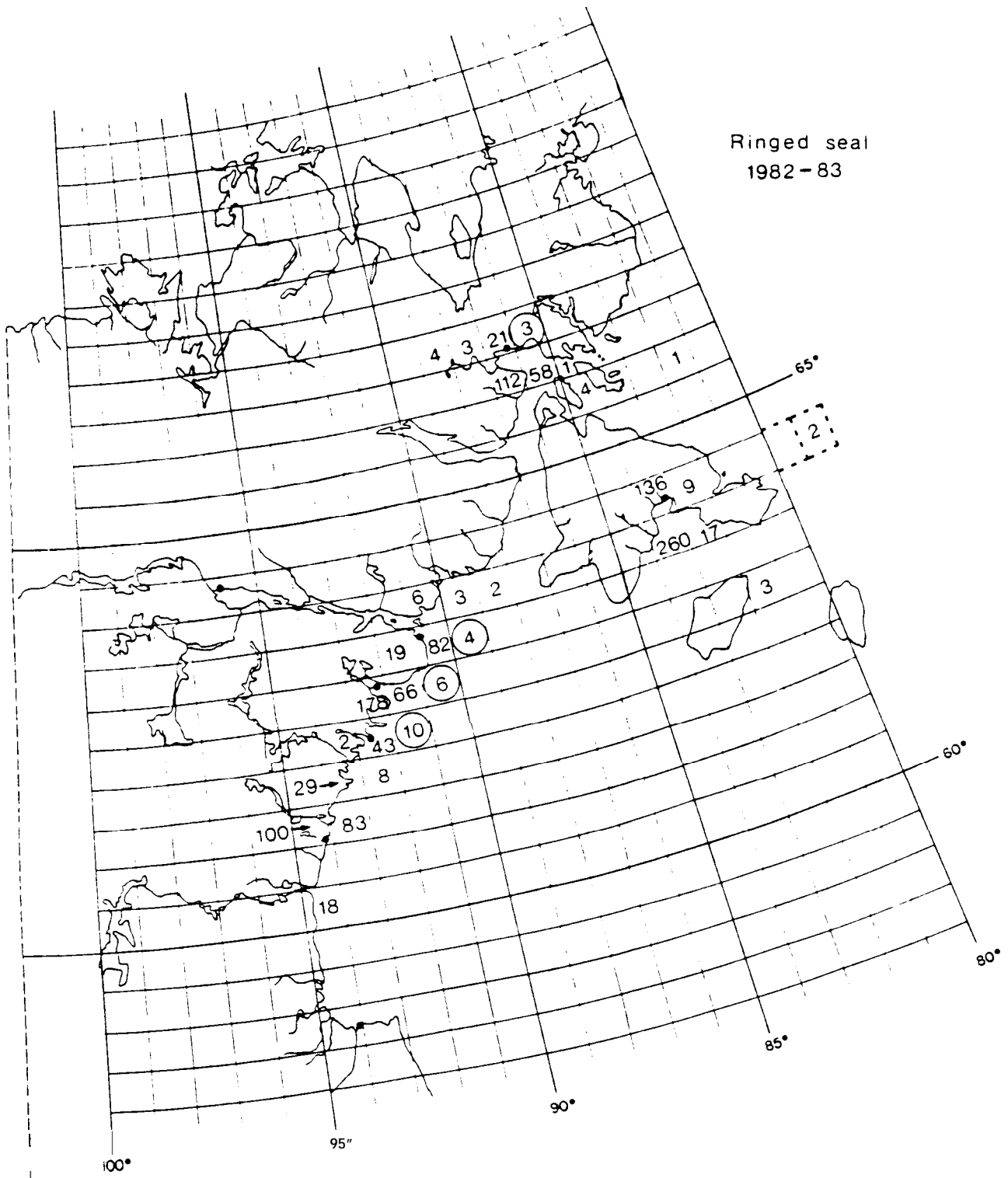


Fig. 3. Cent'd

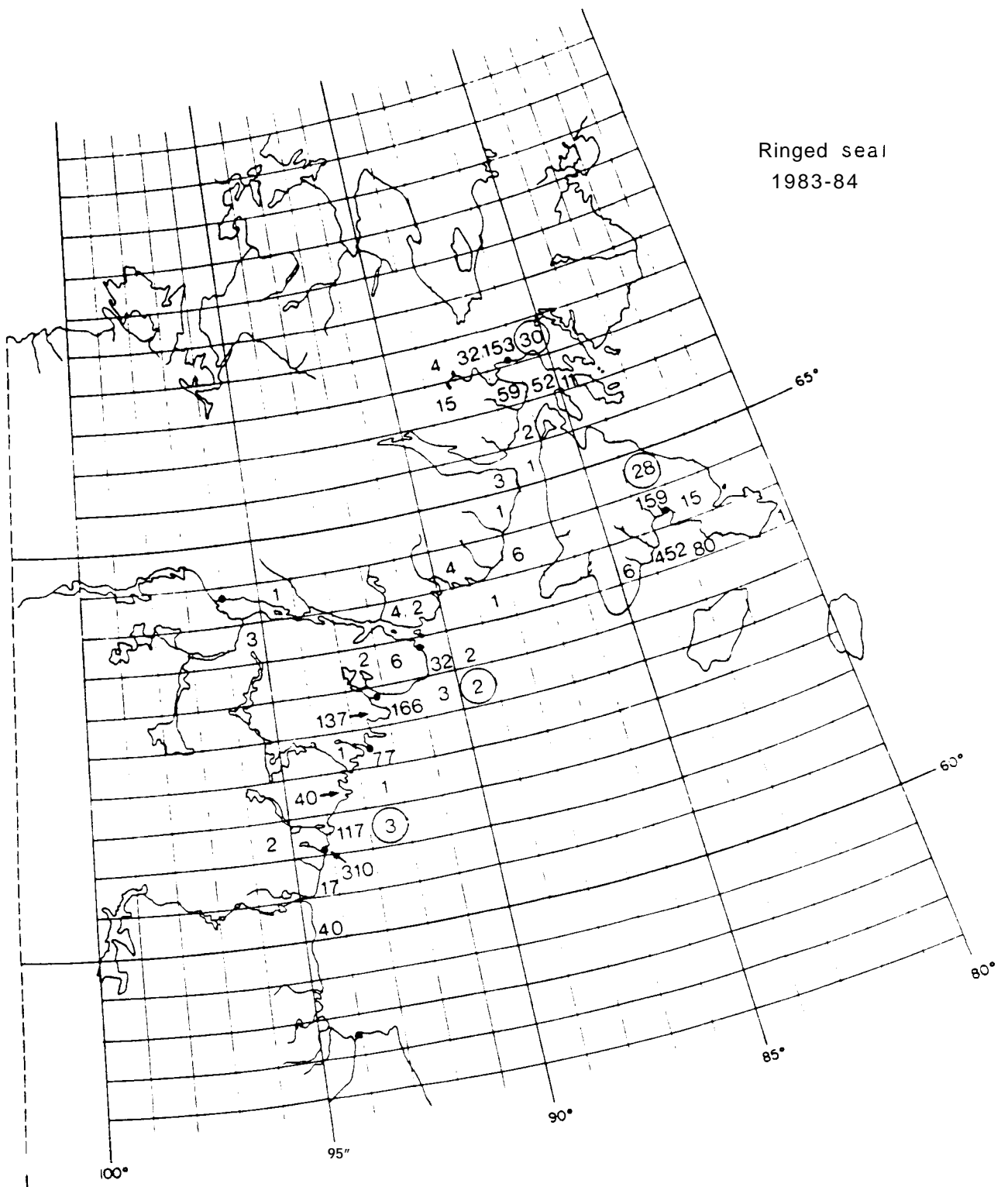


Fig. 3. Cent'd

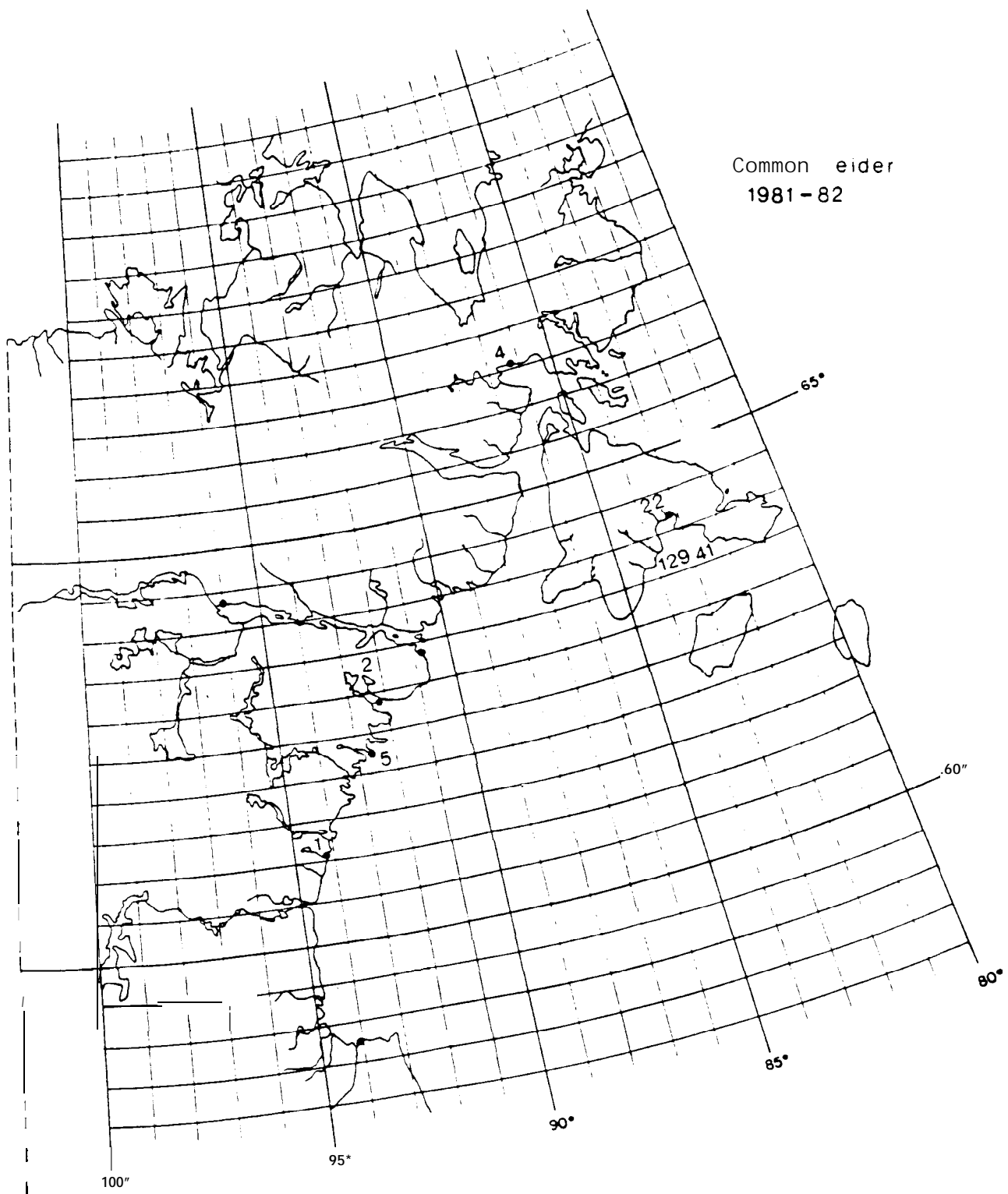


Fig. 4. Zone map for the harvest years, October 1981 through to September 1984, showing the harvest of common eider by area in the Keewatin District. Numbers enclosed by a circle were not identified by zone but were reported in the community harvest.

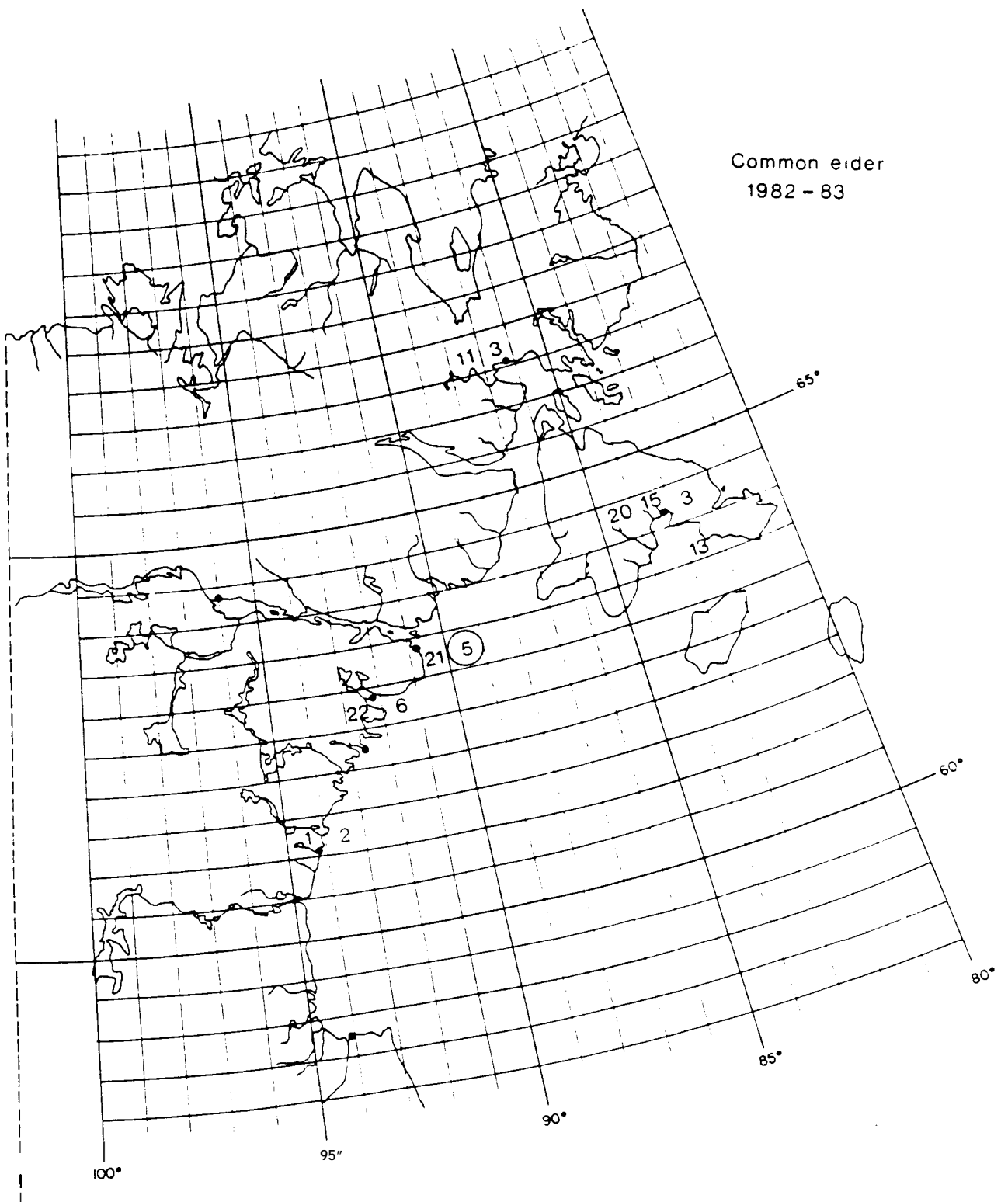


Fig. 4. Cent'd

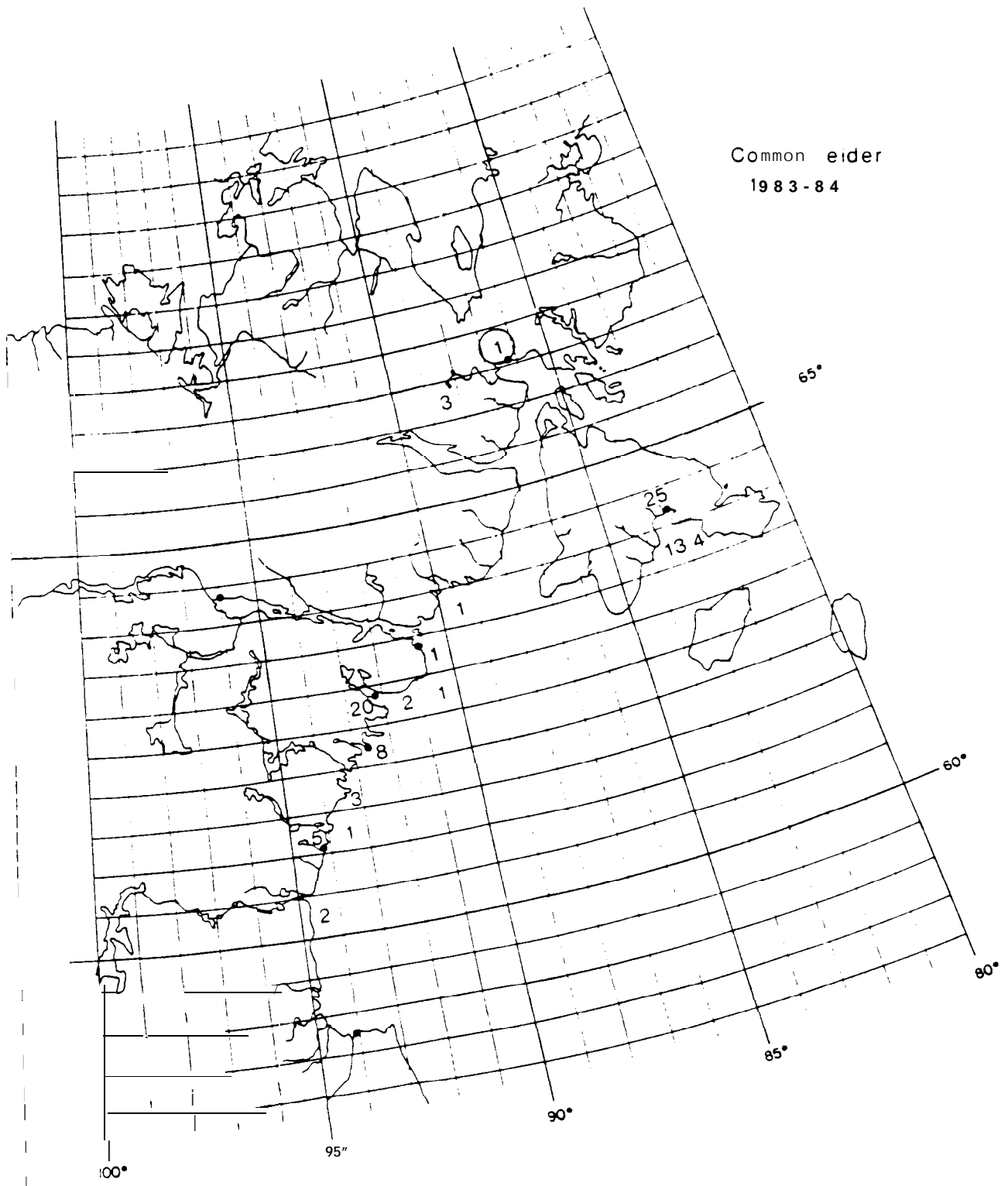


Fig. 4. Cent'd

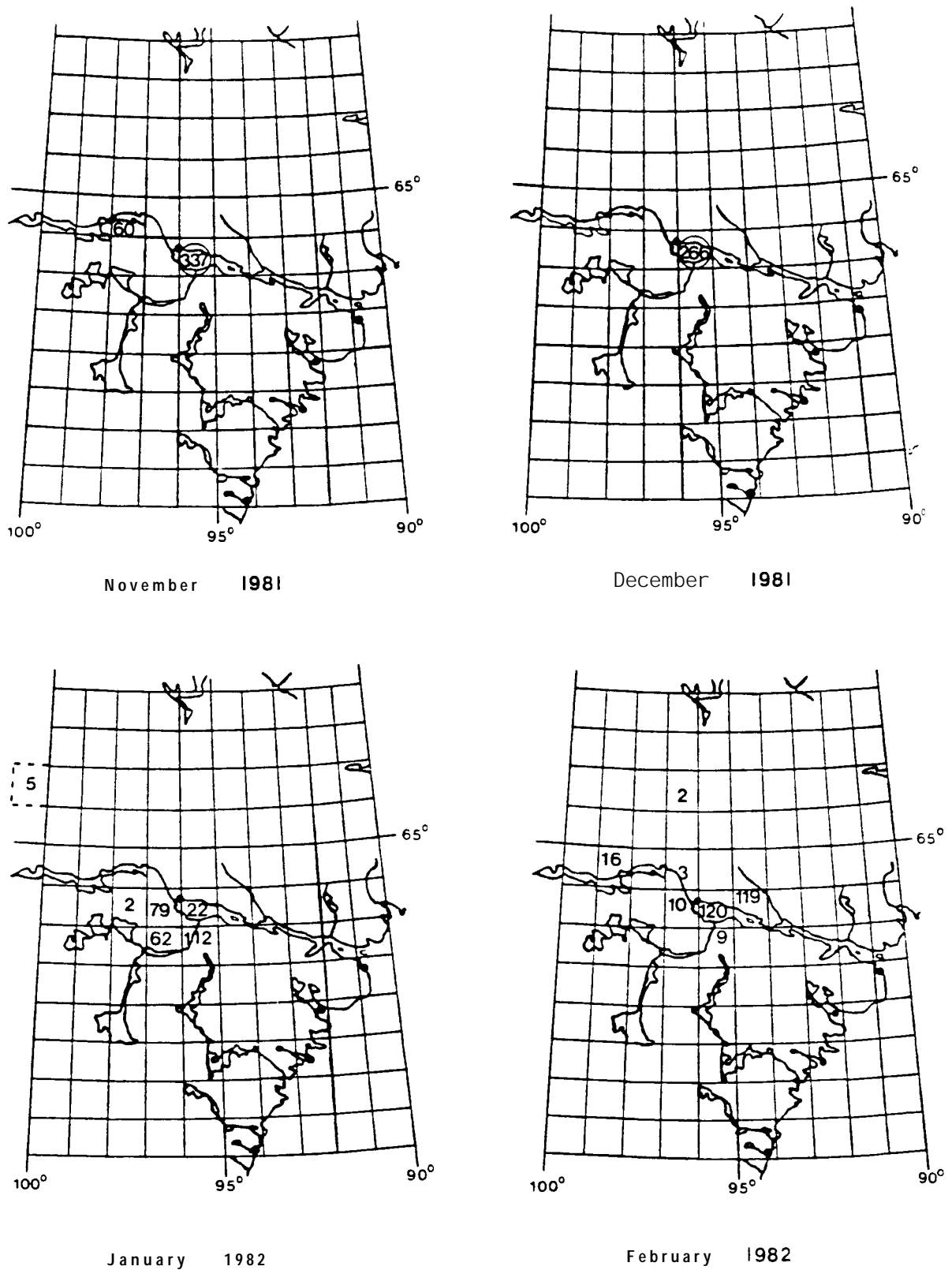
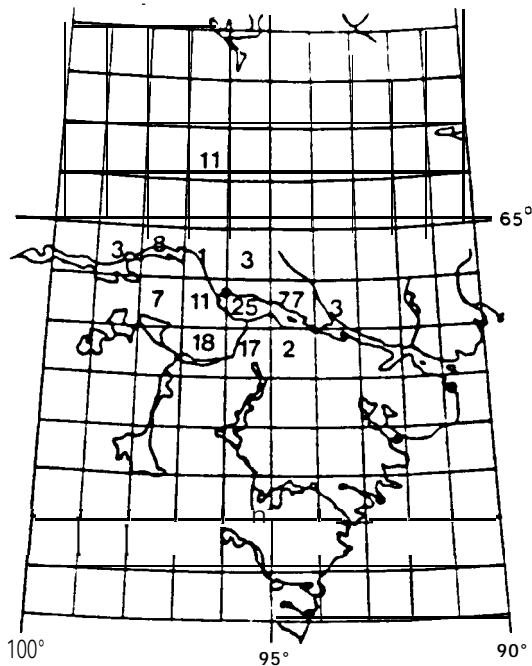
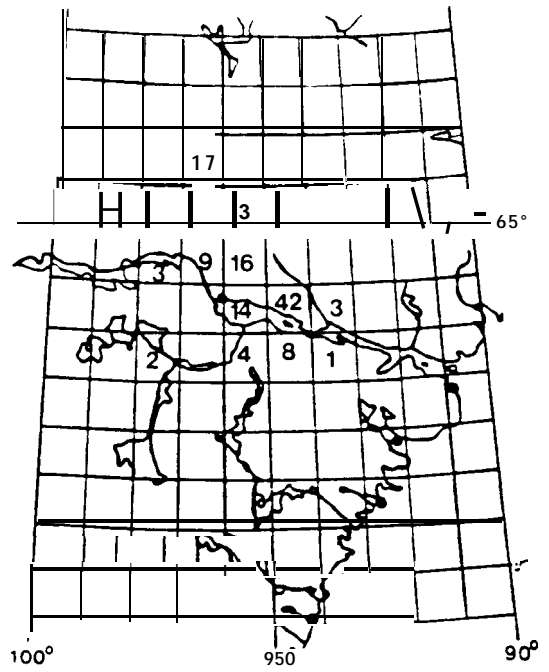


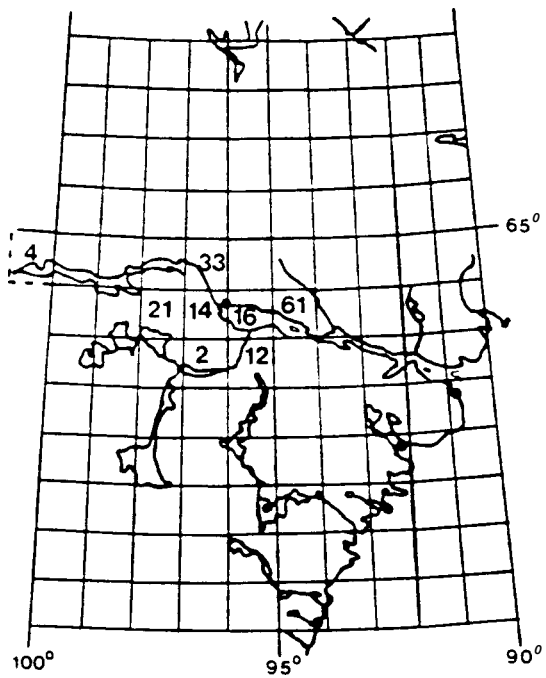
Fig. 5. Zone maps showing the monthly harvest of caribou by area for Baker Lake for the period November 1981 to September 1984. Data for August and September 1982 are not available. Numbers enclosed by a circle were not identified by zone but were reported in the community harvest.



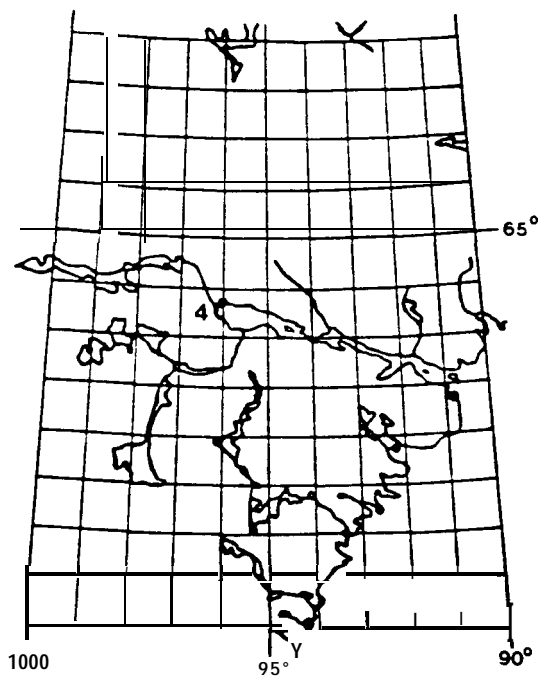
March 1982



April 1982

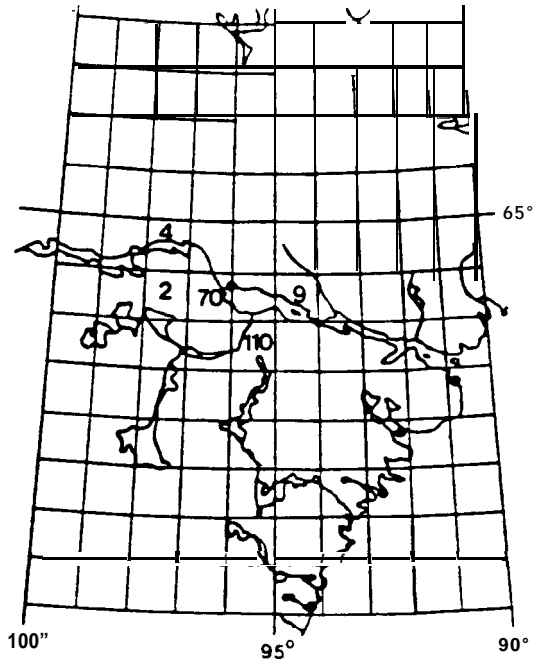


May 1982

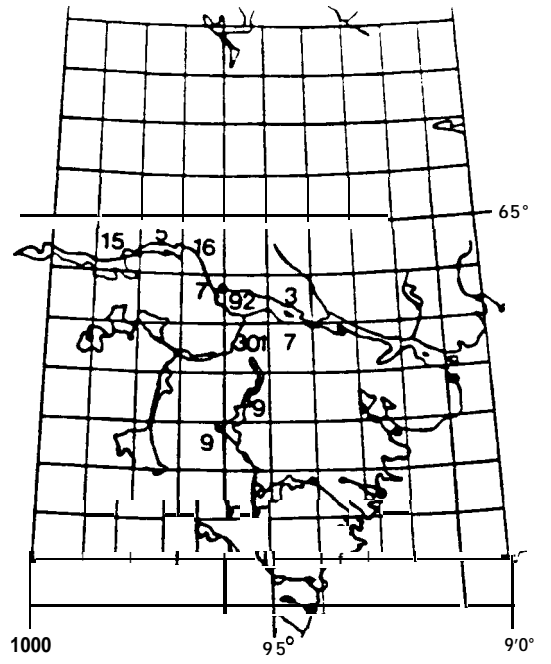


June 1982

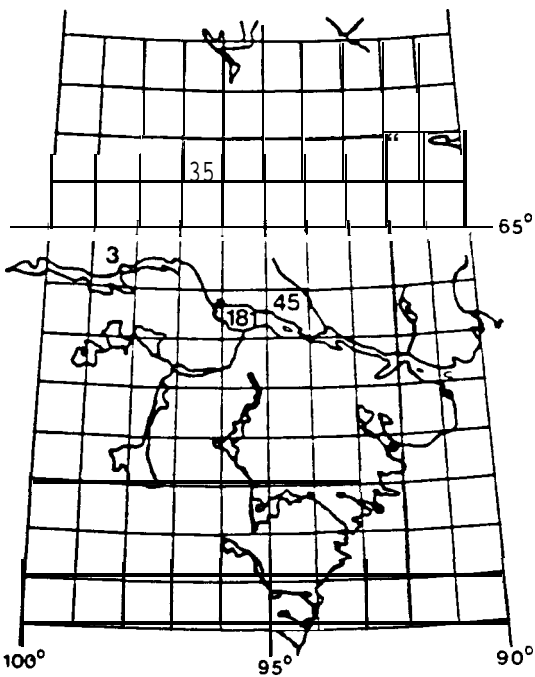
Fig. 5. Cent'd



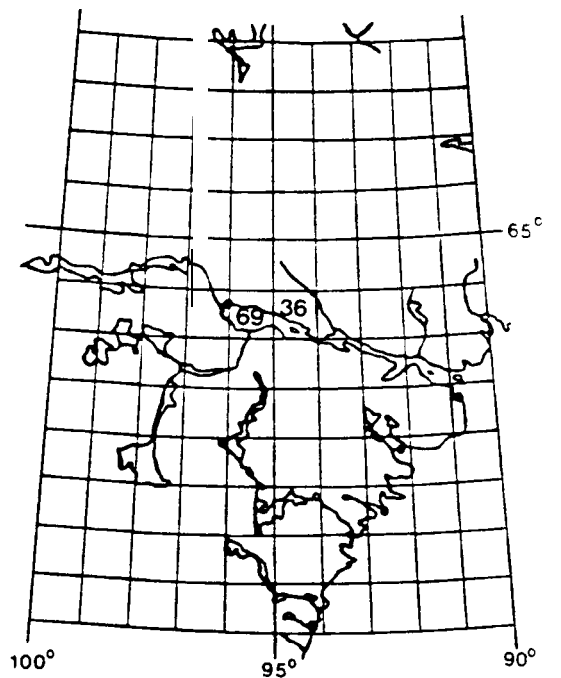
July 1982



September 1982

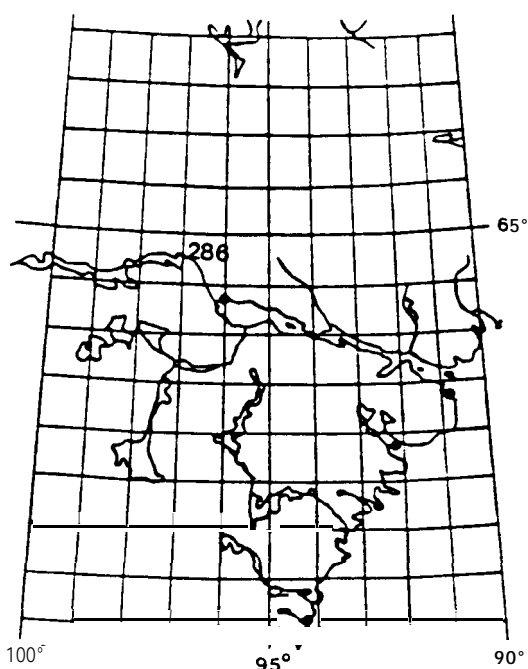


November 1982

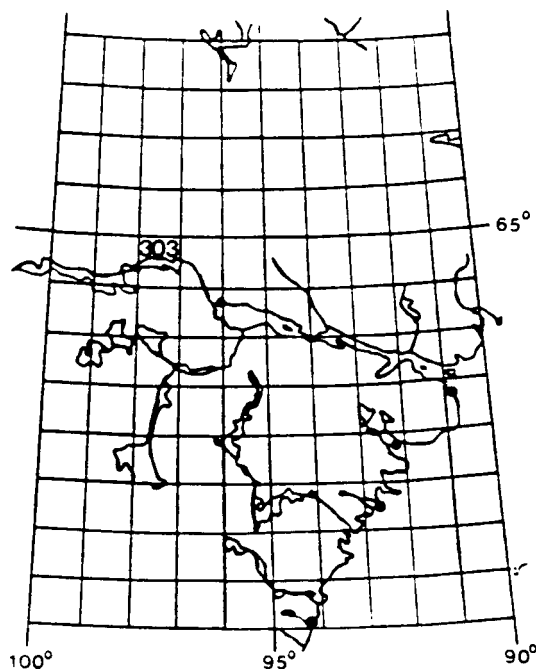


December 1982

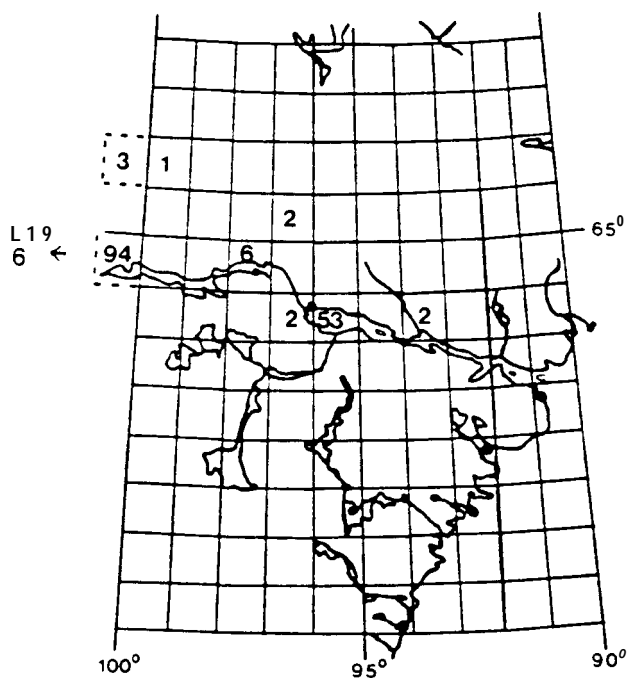
Fig. 5. Cent' d



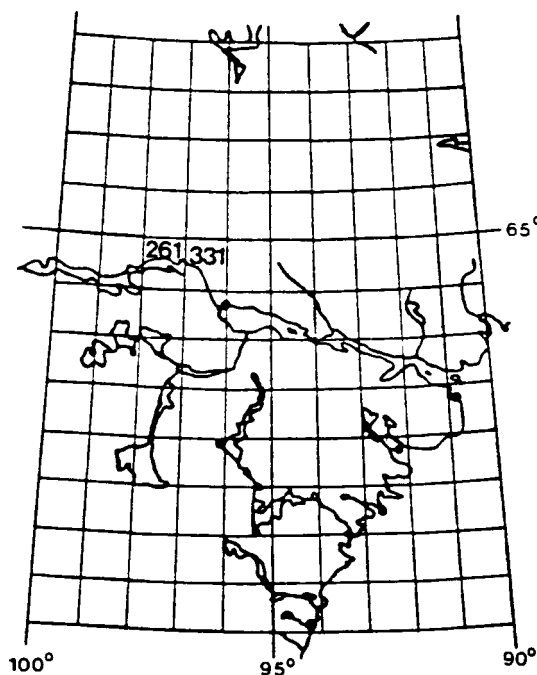
January 1983



February 1983

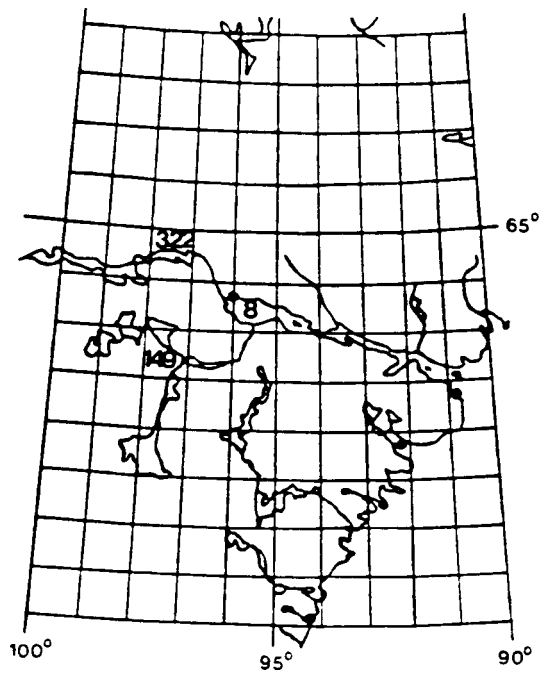


March 1983

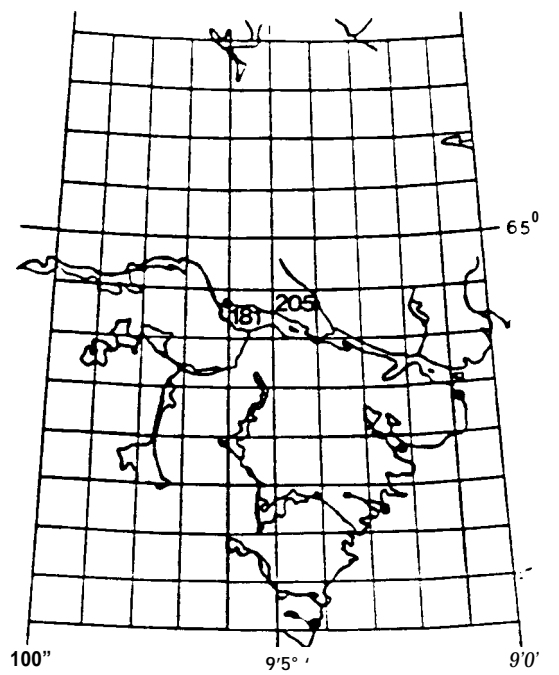


April 1983

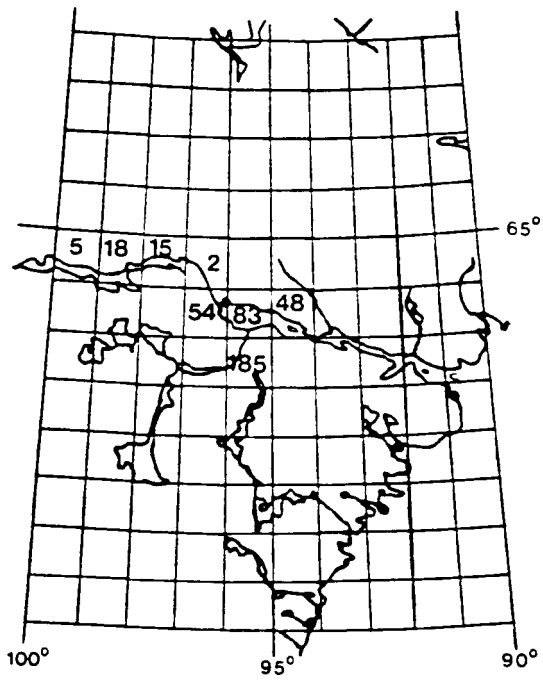
Fig. 5. Cont'd



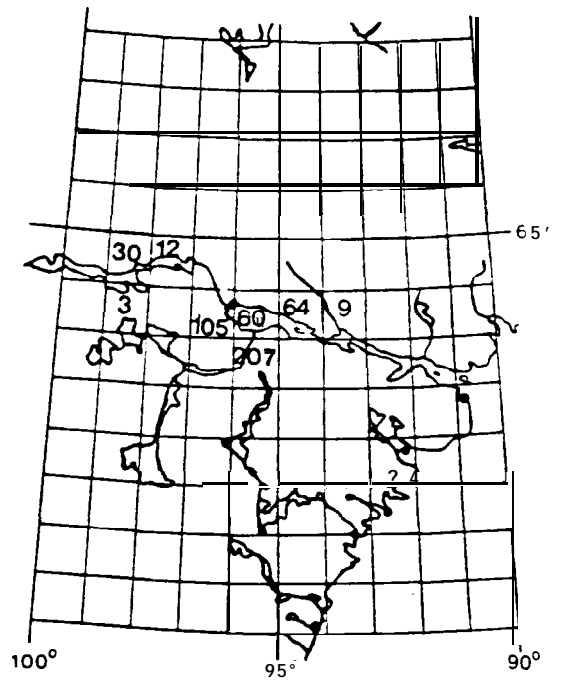
May 1983



June 1983

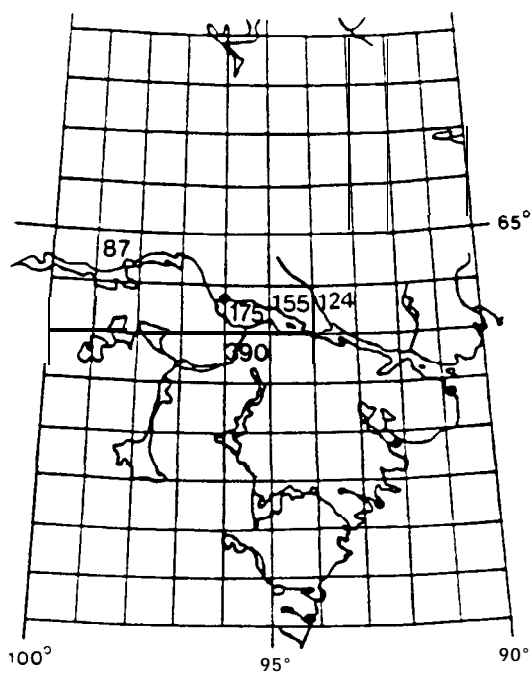


July 1983

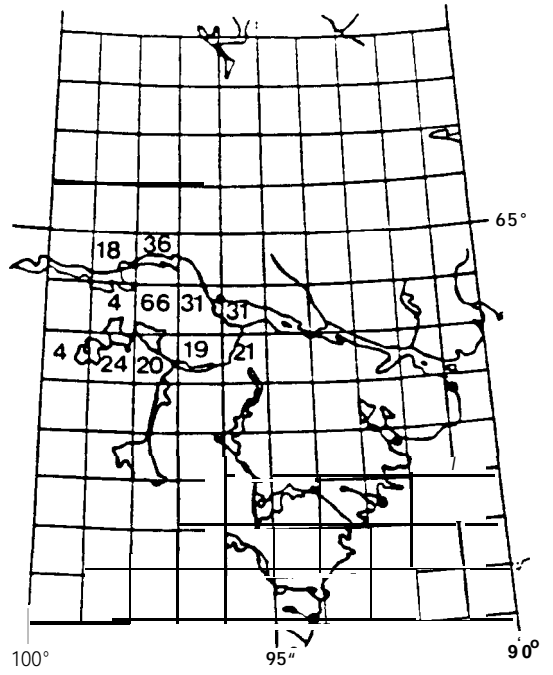


August 1983

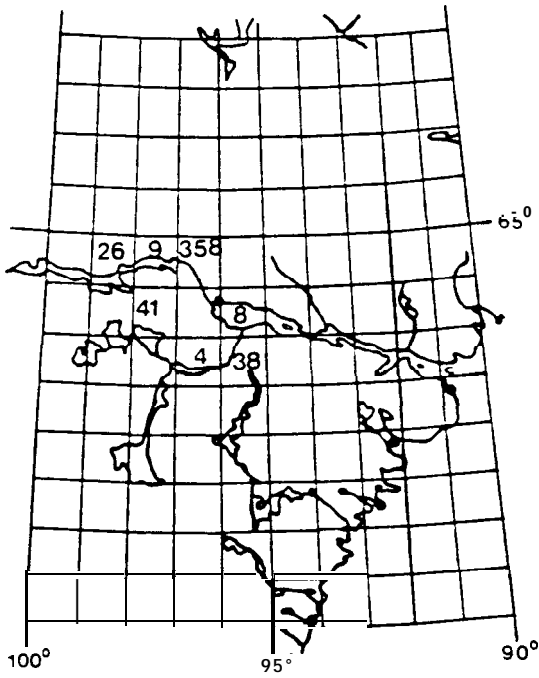
Fig. 5. Cent'd



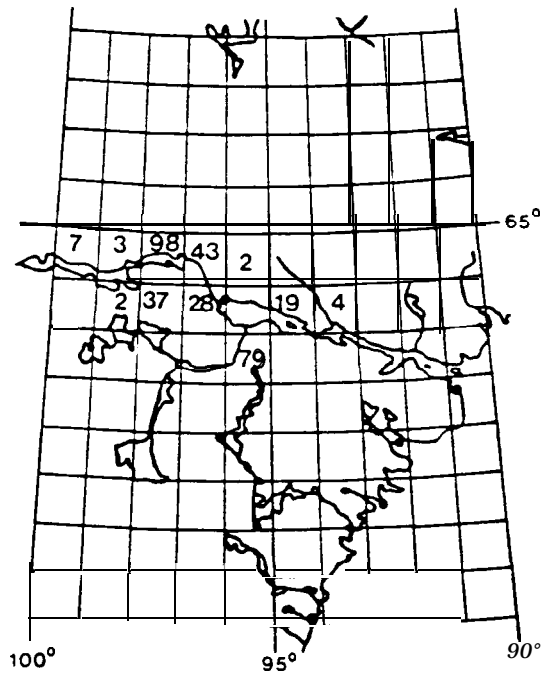
September 1983



October 1983

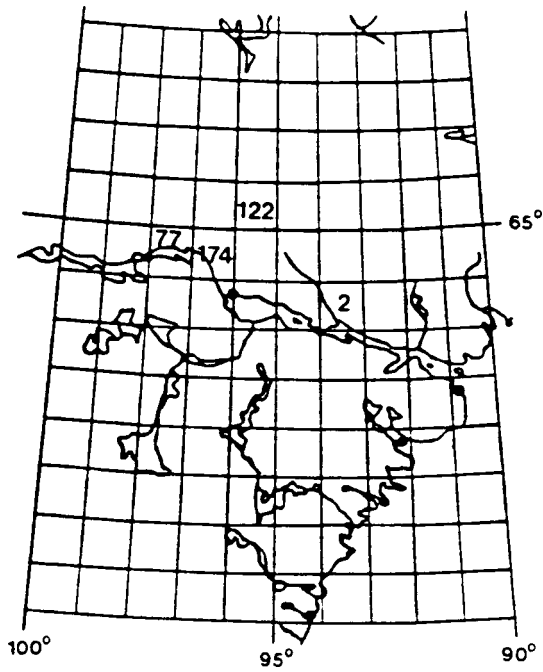


November 1983

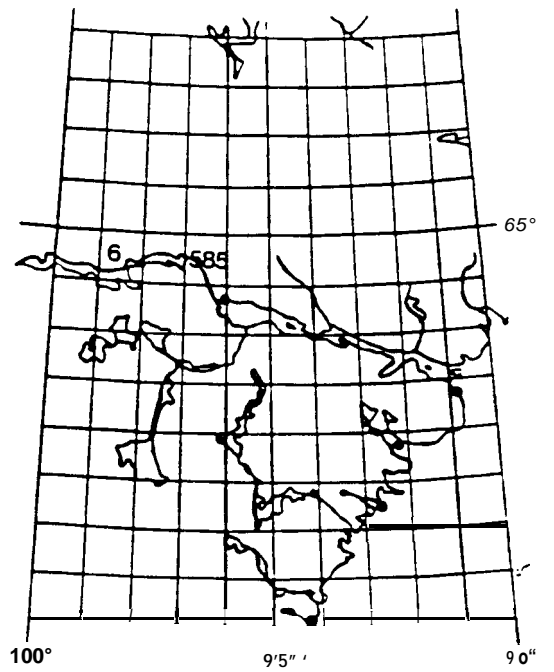


December 1983

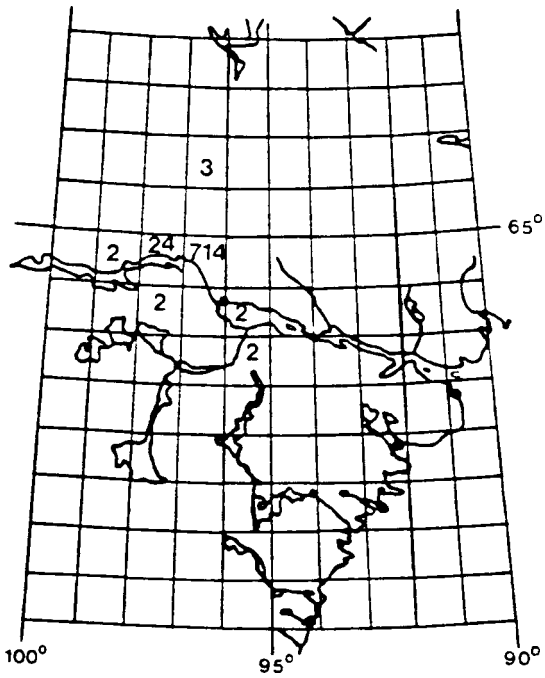
Fig. 5. Cont'd



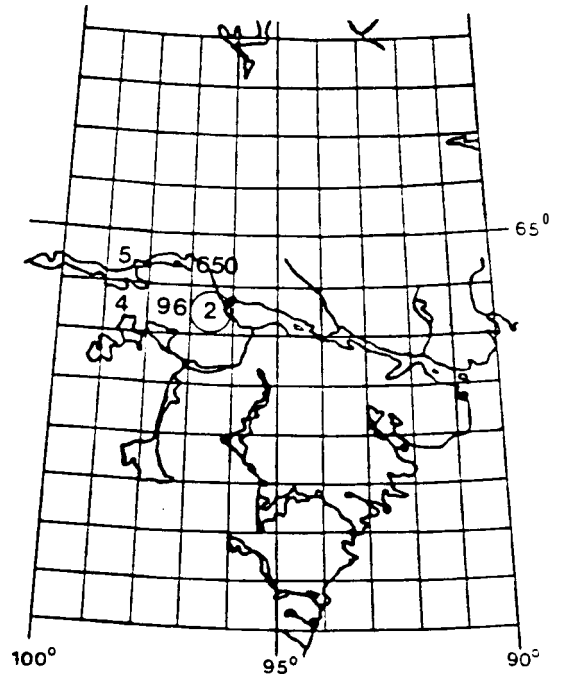
January 1984



February 1984

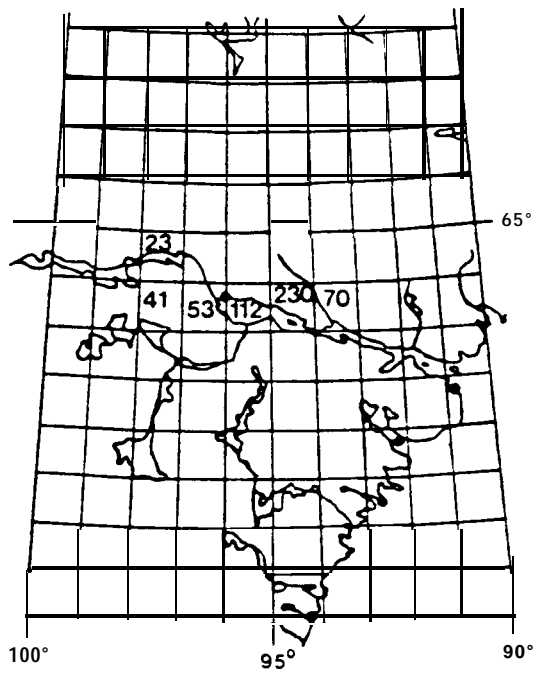


March 1984

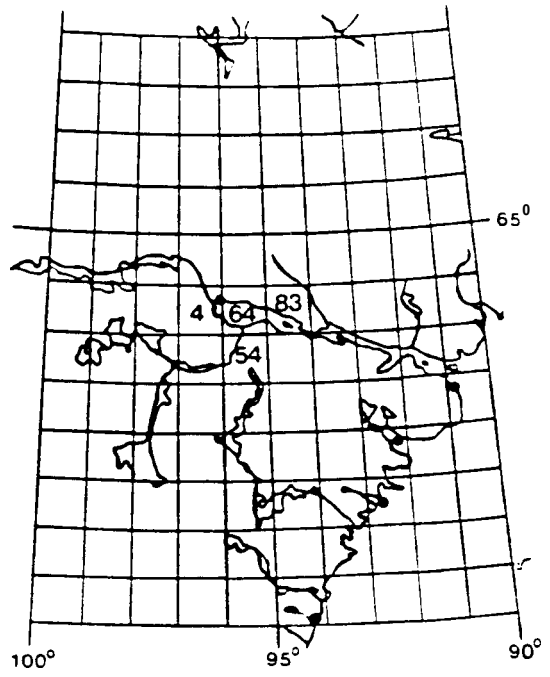


April 1984

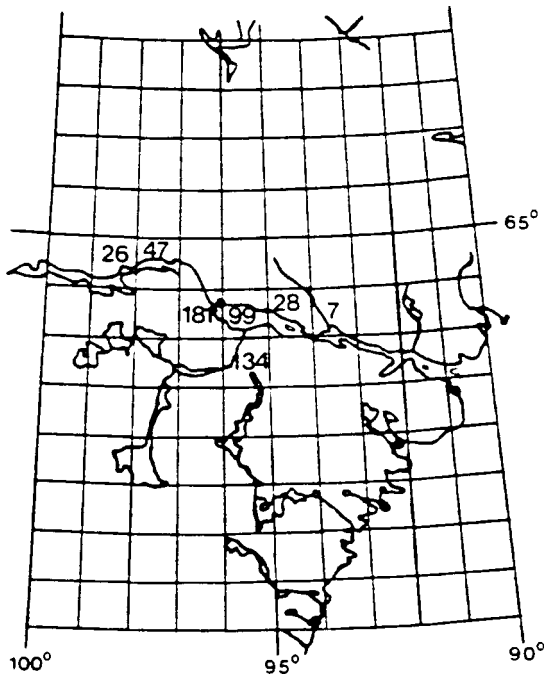
Fig. 5. cent'd



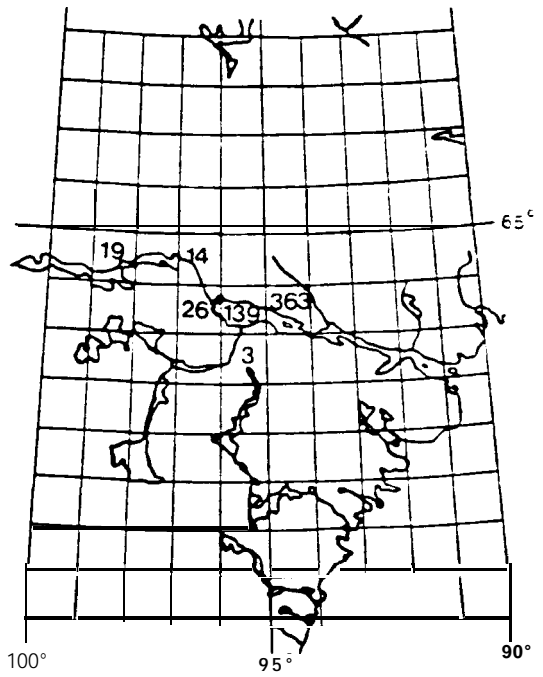
May 1984



June 1984

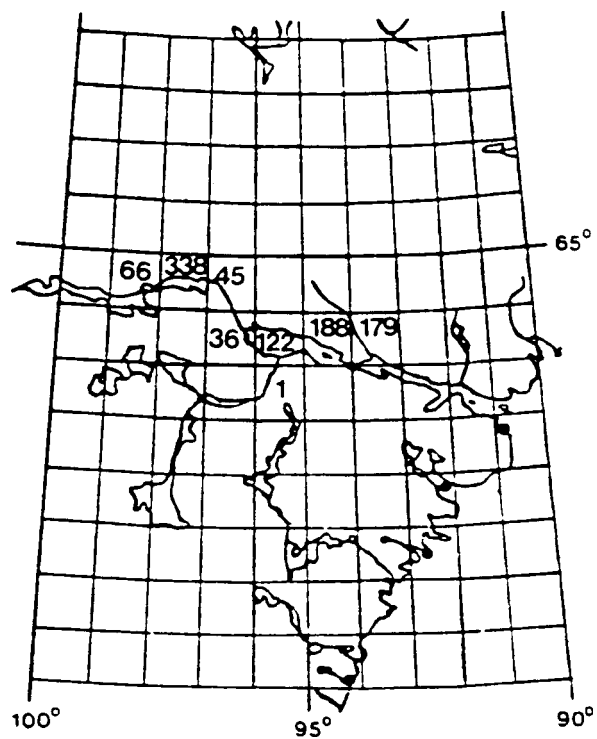


July 1984



August 1984

Fig. 5. Cent' d



September 1984

Fig. 5. Cent'd

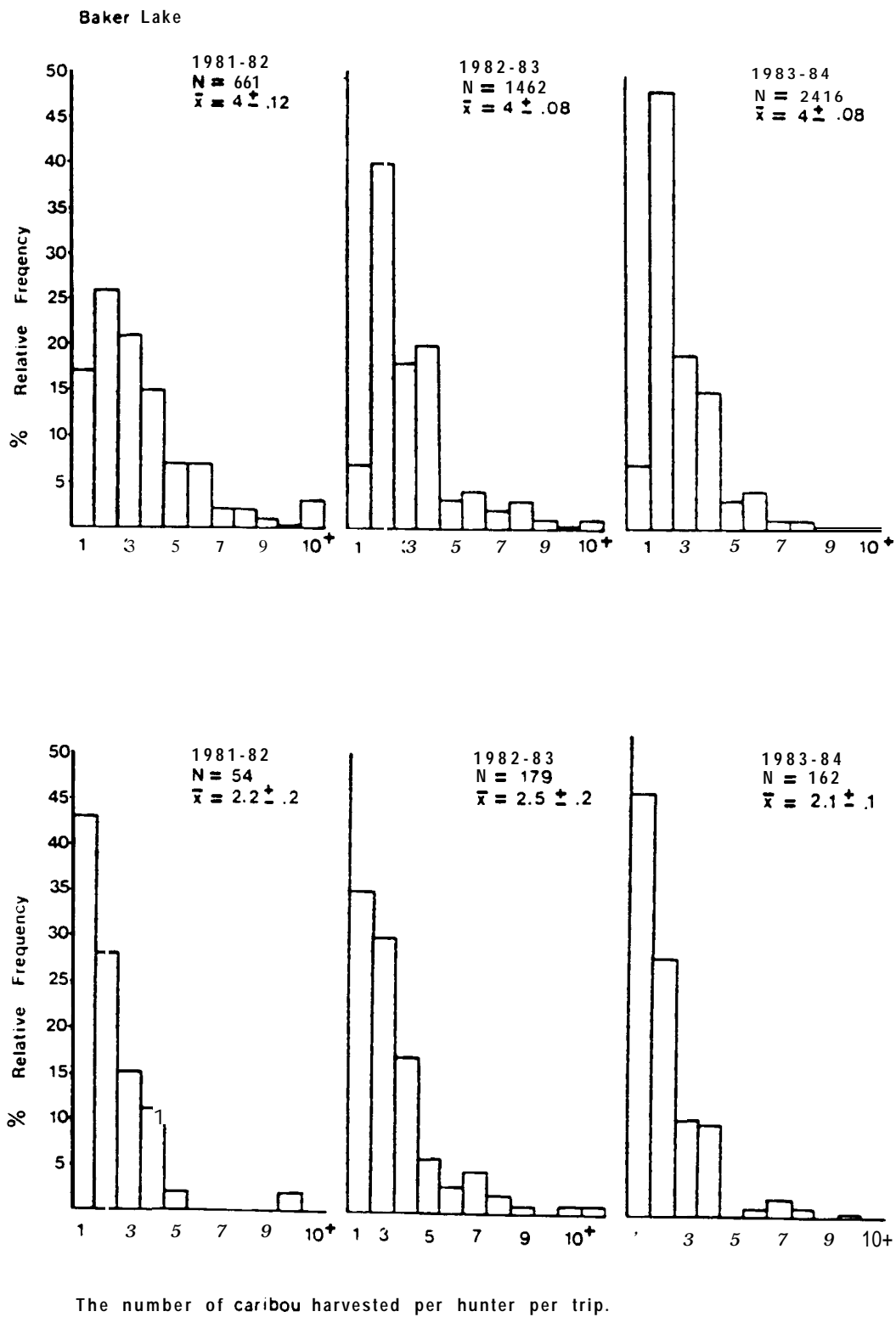


Fig. 6. Histogram showing the percent relative frequency of caribou harvested per hunt by hunters from the seven Keewatin communities for the years 1981 to 1984

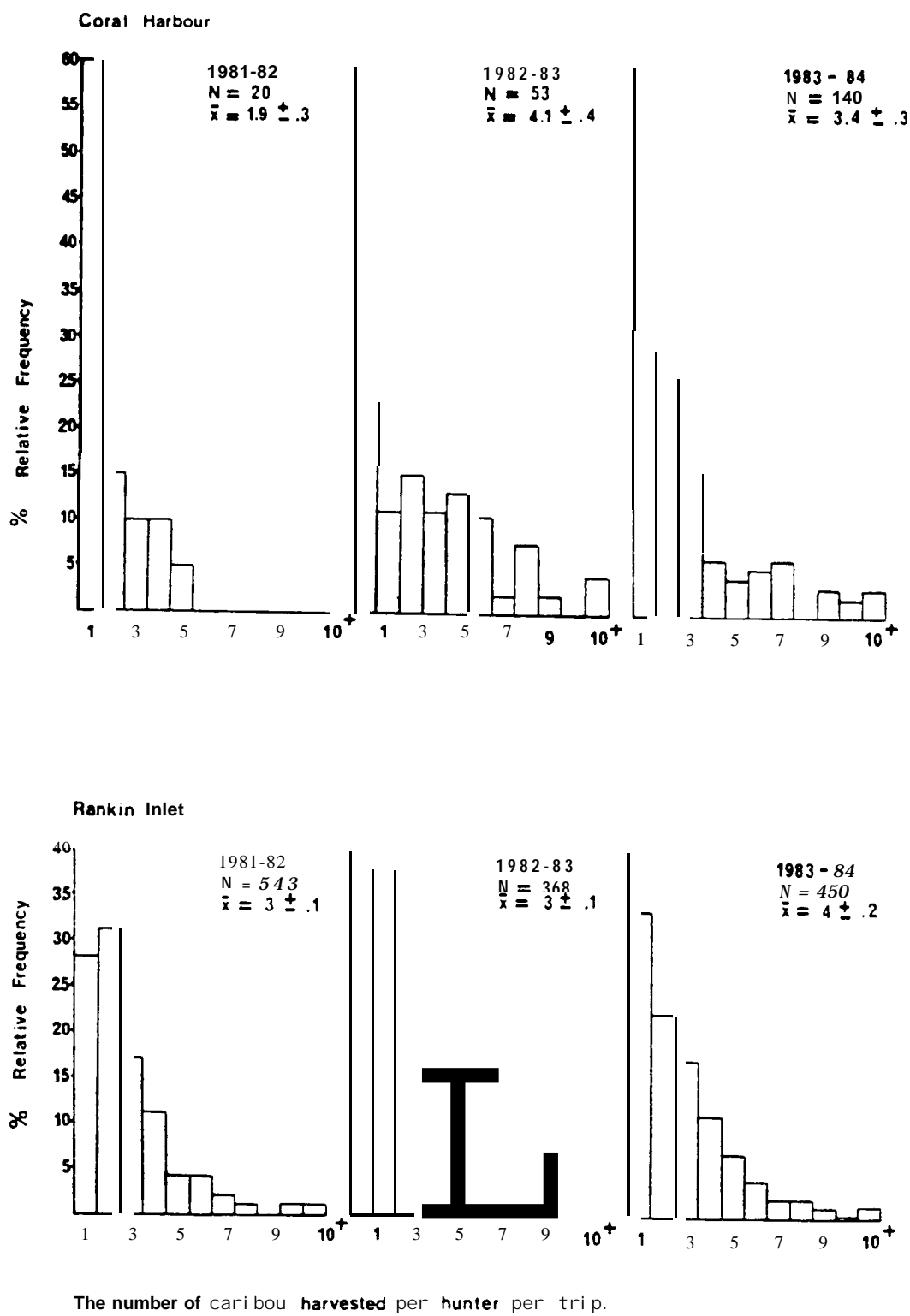
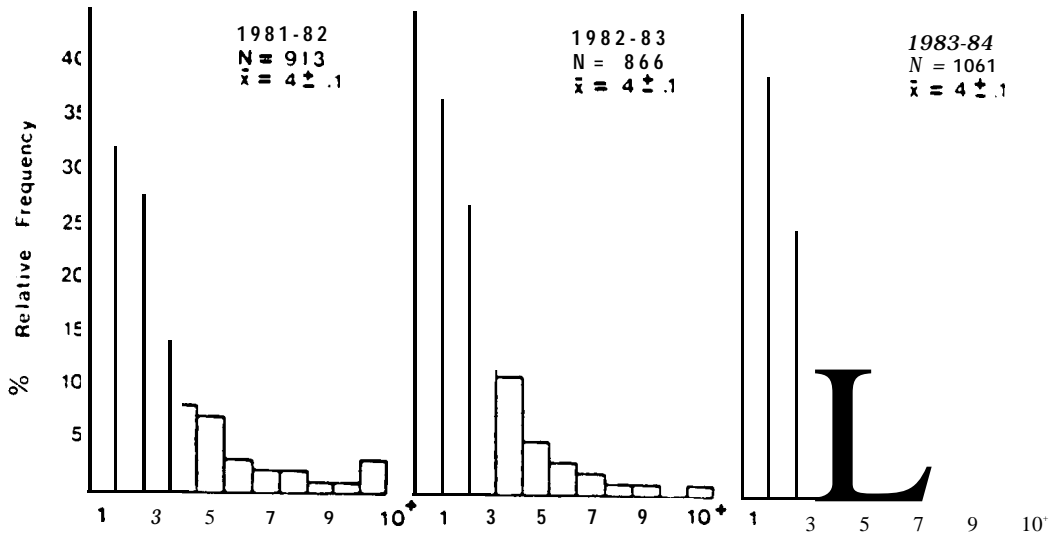
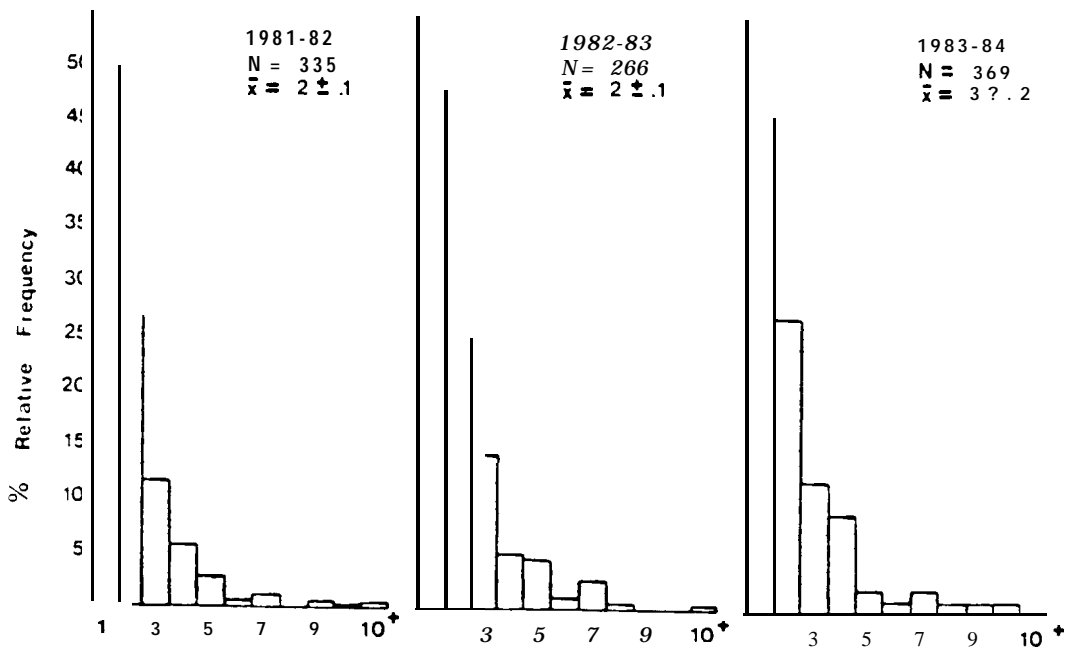


Fig. 6. Cent'd

Eskimo Point



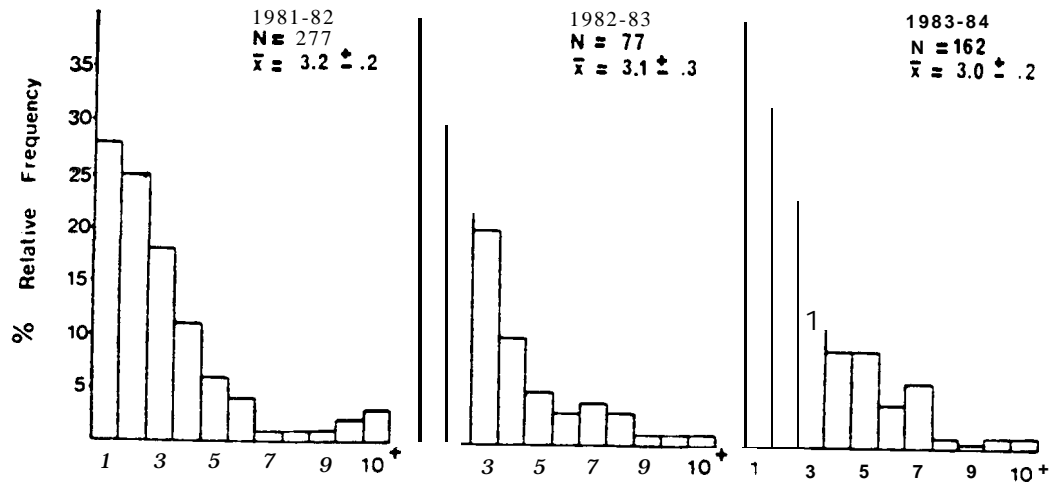
Repulse Bay



The number of caribou harvested per hunter per trip.

Fig. 6. Cont'd

Whale Cove



The number of caribou harvested per hunter per trip.

Fig. 6. Cent' d

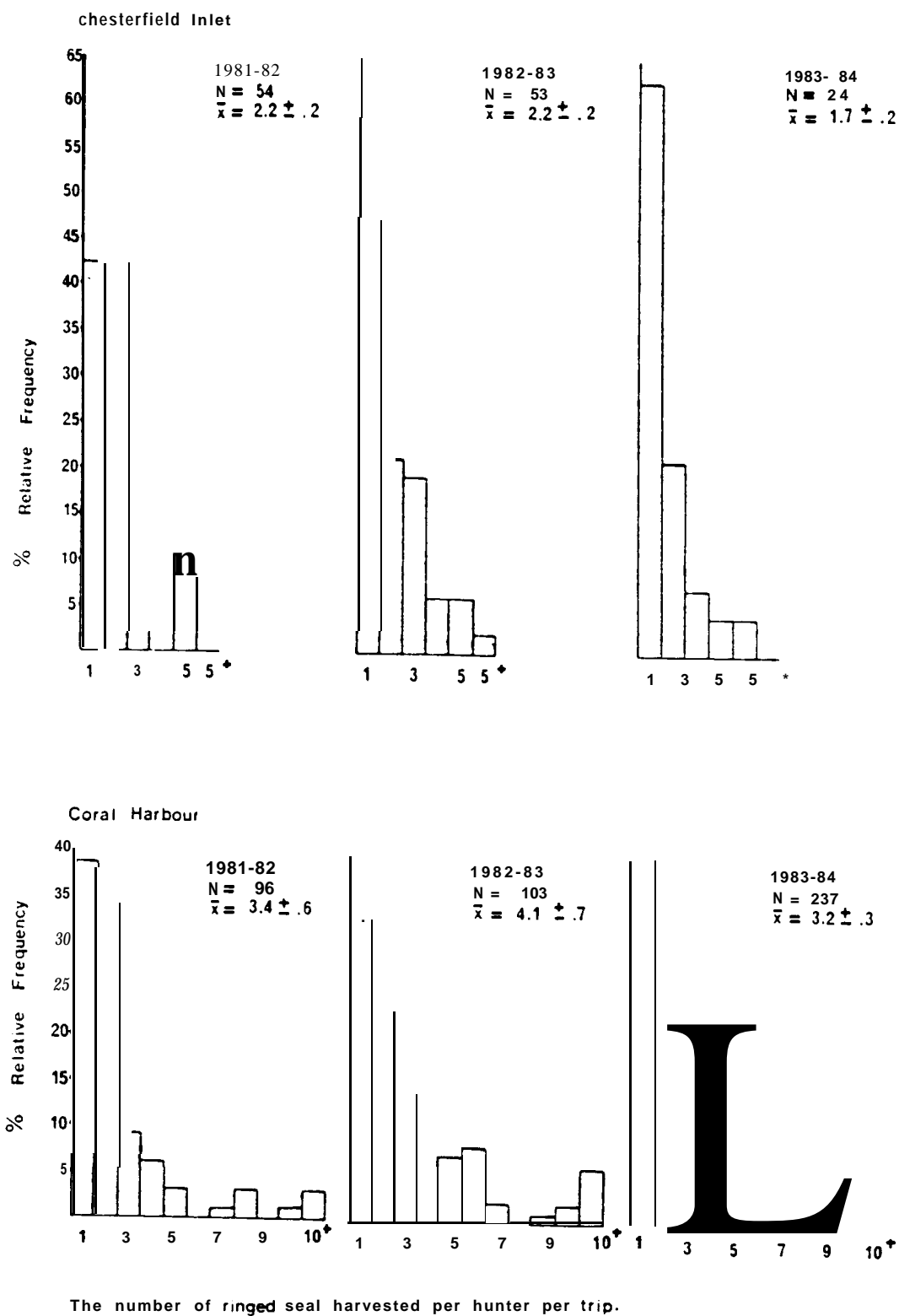
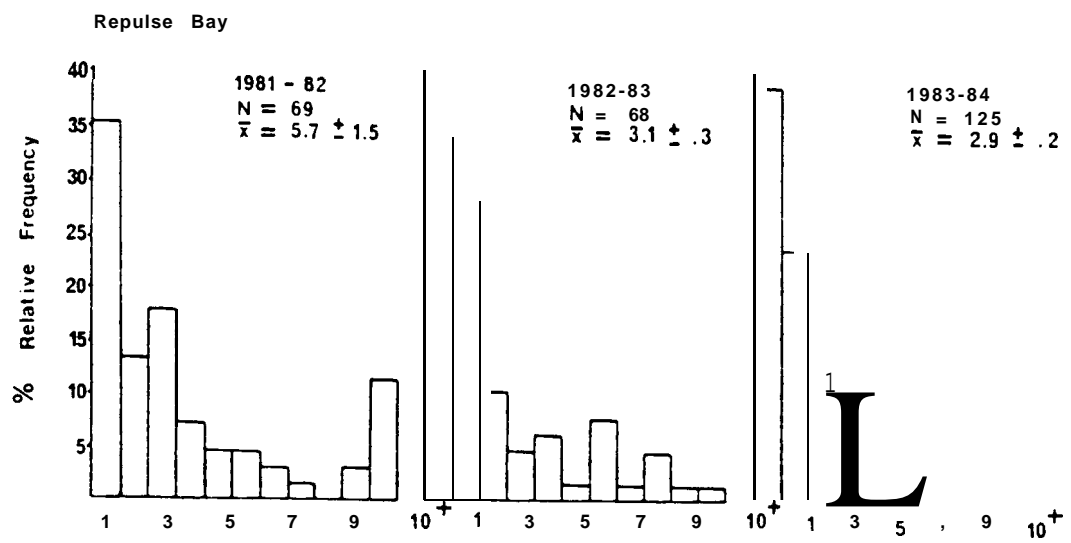
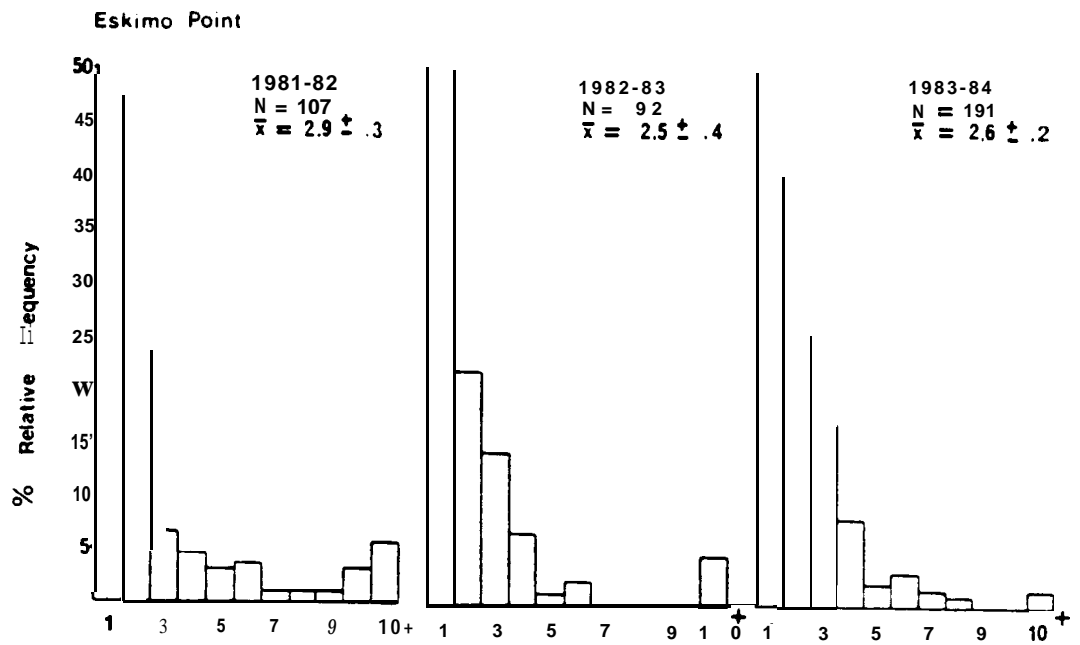
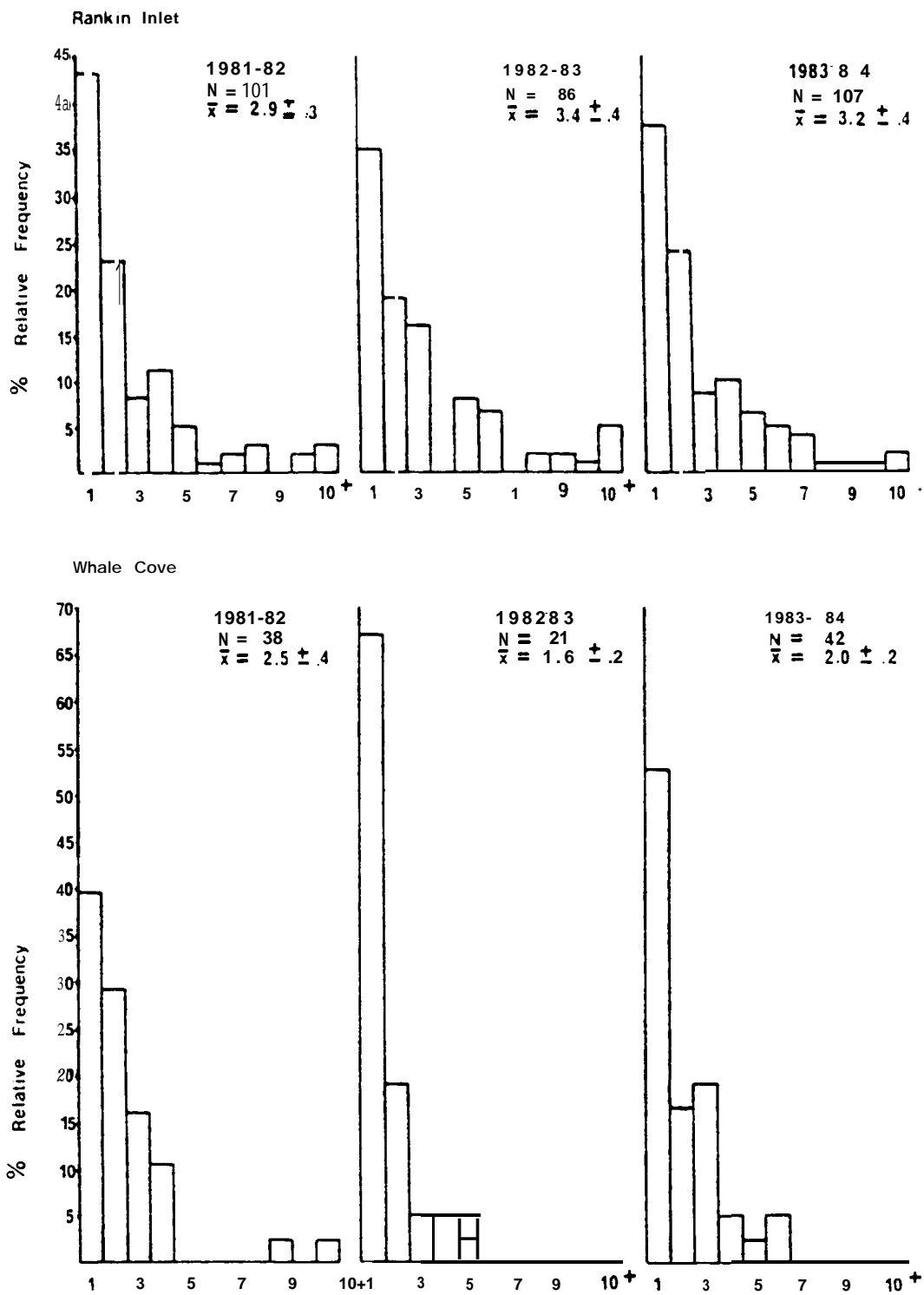


Fig. 7. Histogram showing the percent relative frequency of ringed seal harvested per hunt by hunters for the years 1981 to 1984



The number of ringed seal harvested per hunter per trip.

Fig. 7. Cont'd



The number of ringed seal harvested per hunter per trip.

Fig. 7. Cent'd

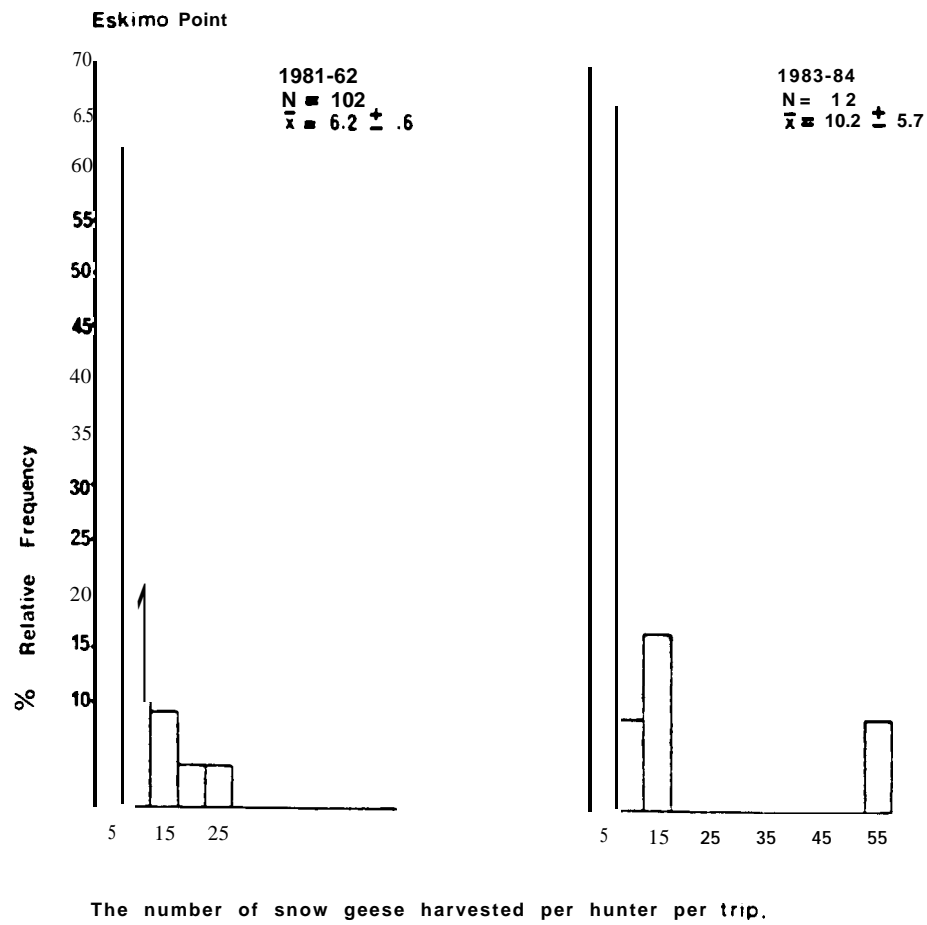
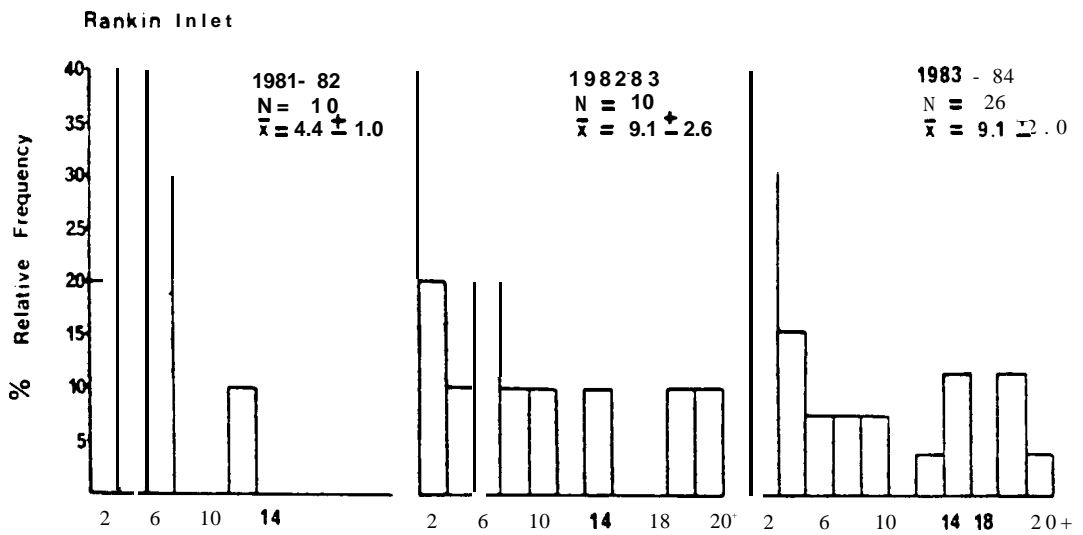
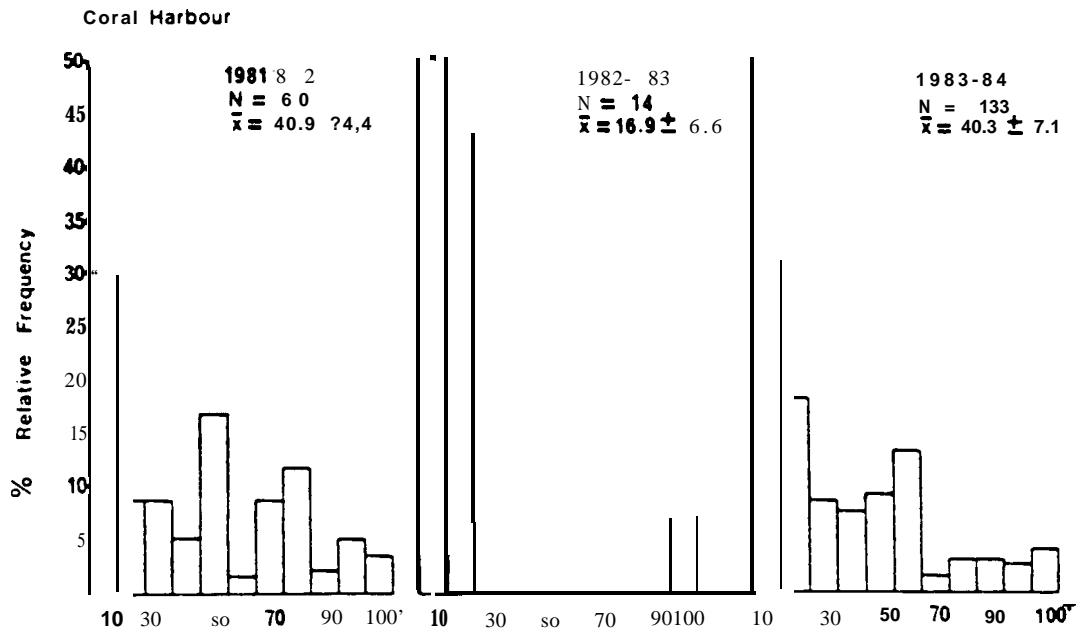
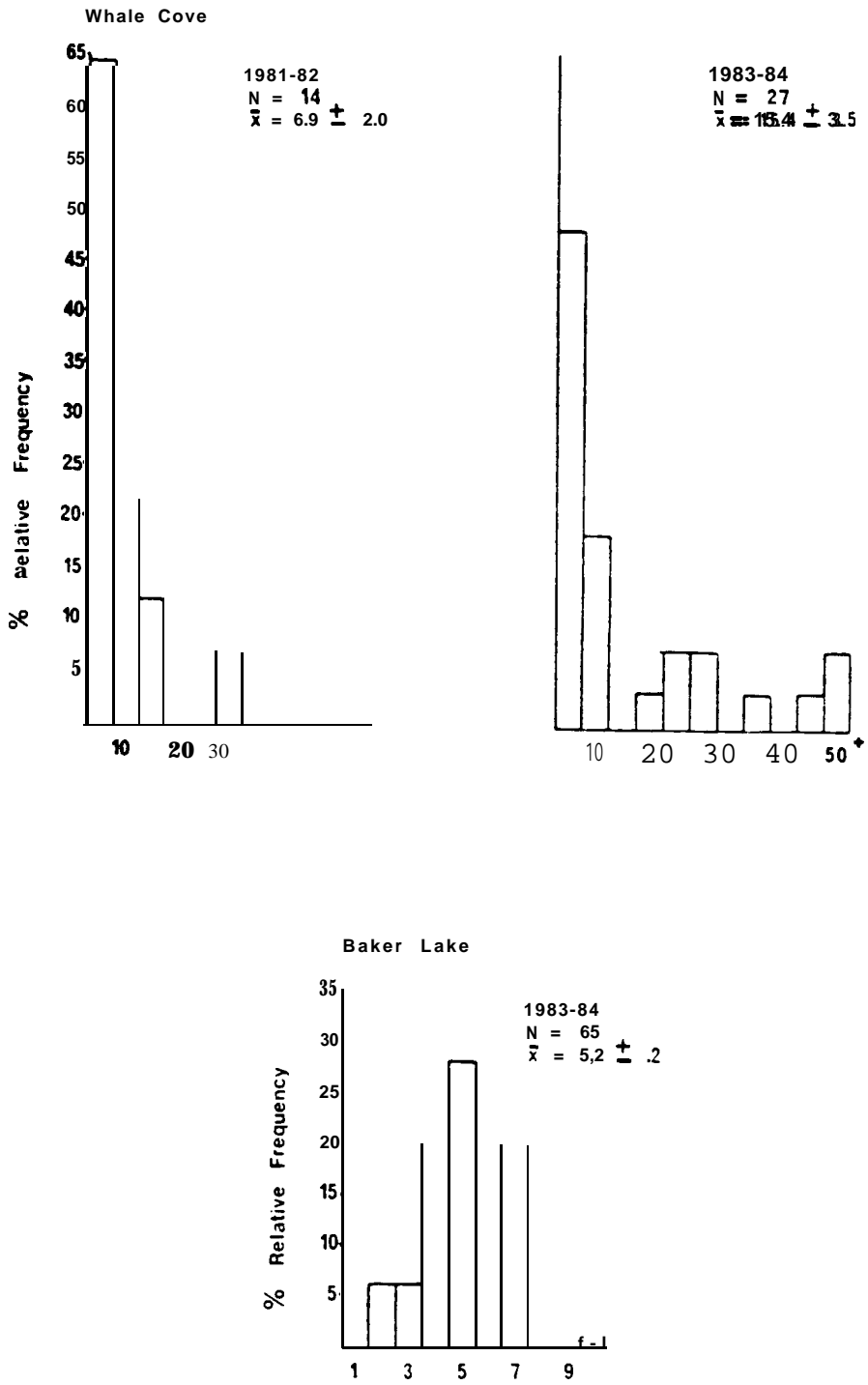


Fig. 8. Histogram showing the percent relative frequency of snow geese harvested per hunt by hunters for the years 1981 to 1984



The number of snow geese harvested per hunter per trip.

Fig. 8. Cent'd



The number of snow geese harvested per hunter per trip.

Fig. 8. Cont'd

Appendix 1. Members of the Steering Committee for the **Keewatin** Wildlife Federation Harvest Study.

Chairperson

Mr. F. McFarland Northern Affairs Program, **Department** of Indian Affairs and Northern Development.

Members

Mr. R. Cole Canadian Wildlife Service, Department of the Environment.

Mr. R. **Graf** Department of Renewable Resources, Government of the Northwest Territories.

Mr. R. Peet Department of Fisheries and Oceans.

Mr. **D. Milortok** President, **Keewatin** Wildlife Federation.

Mr. L. Gamble Regional Resource Manager, Keewatin Harvest Study.

Ms. V. **Curley** Assistant Regional Resource Manager, **Keewatin** Harvest Study.

Appendix 2. Calculation of Estimated Harvest.

This appendix lists the steps used to arrive at an estimate of total monthly hunter kill using the interview data from Eskimo Point, September, 1982 as an example. The letter designations for each category are defined in the text under the section on data **analysis**. The bracketed statement is a shortened designation for these definitions for the purposes of this appendix.

I. Interview Data, Eskimo Point, September, 1982.

<u>Category</u>		<u>Number of hunters</u>
A	(successful)	102
B	(unsuccessful)	23
c	(didn't hunt)	85
D	(hunted but not interviewed)	14
E	(out of hunt area)	6
F	(activities not known)	8

II. Calculations

- the known number of hunters who hunted = $A + B = 102 + 23 = 125$.
- the success ratio of the hunters that hunted and were interviewed = $\frac{A}{A + B} = \frac{102}{102 + 23} = 0.816 = G$
- the estimated success of those out hunting but not interviewed = $G \times D = 0.816 \times 14 = 11.4 = H$
- the total number of hunters whose activities are accounted for = $A + B + C + D + E = 102 + 23 + 85 + 14 + 6 = 230 = I$
- the total number of hunters that could have hunted = $I + F = 230 + 8 = 238 = J$
- the estimated success ratio of successful hunters interviewed in relation to the total hunters whose activities are accounted for = $\frac{A}{I} = \frac{102}{230} = 0.444 = K$
- the estimated success of hunters whose activities are unknown = $K \times F = 0.444 \times 8 = 3.6 = L$
- the estimated total success = $A + H + L = 102 + 11.4 + 3.6 = 117 = M$
- the theoretical kill factor = $\frac{M}{A} = \frac{117}{102} = 1.14 = N$
These factors are listed in Table 15 for each community by month.
- the participation ratio = $\frac{A + B + C}{J} \times 100 = \frac{102 + 23 + 85}{238} \times 100 = 88.2\%$
The participation ratios for each community are given in the odd Tables from 1 to 13.
- the estimation of mean monthly kill by species = $N \times$ number harvested for each species from the fieldworker's reports for each hunter in Category A. The results of this calculation are summarized in even Tables 2 through 14.