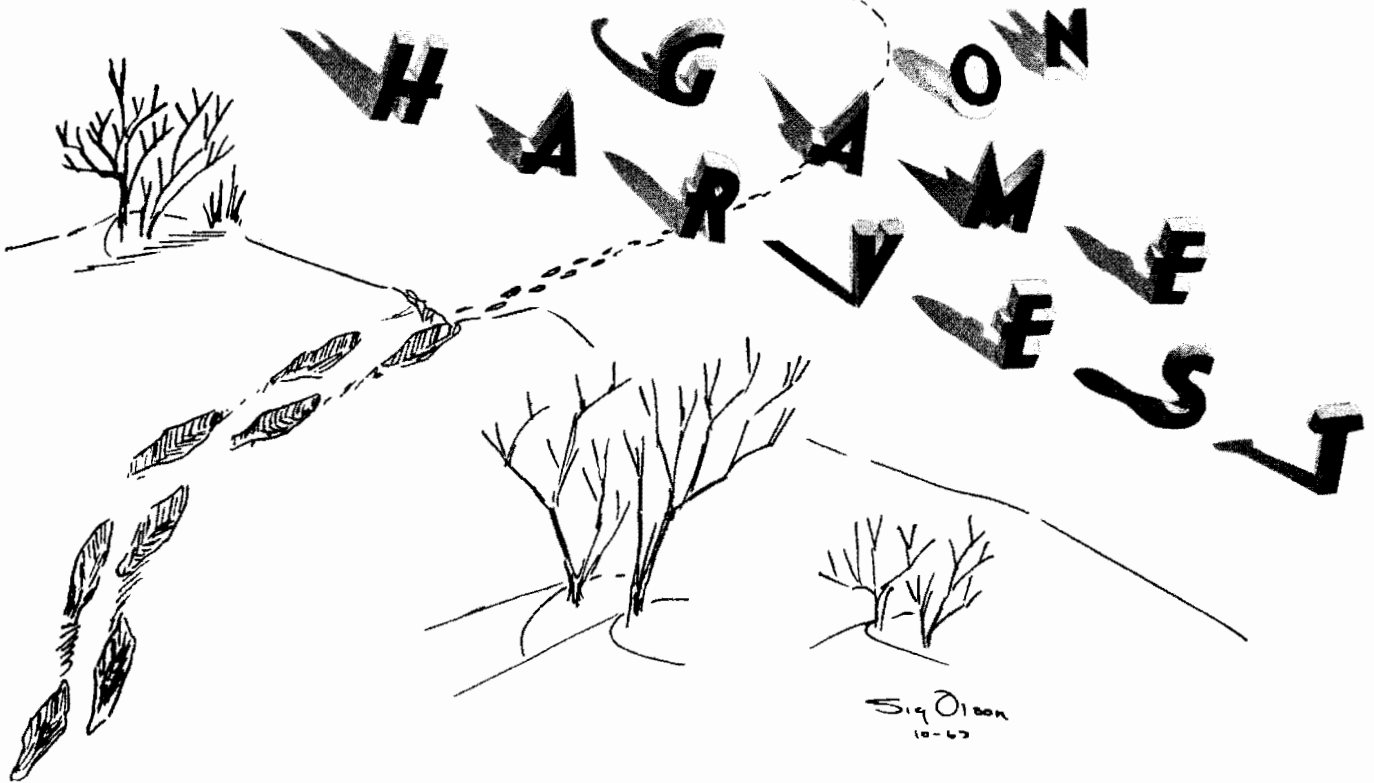


1962-63 REPORT



ALASKA DEPARTMENT OF FISH AND GAME

DIVISION OF GAME

JUNEAU, ALASKA

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STATE OF ALASKA
William A. Egan, Governor

DEPARTMENT OF FISH AND GAME
Walter Kirkness, Commissioner

DIVISION OF GAME
James W. Brooks, Director
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GAME HARVEST REPORT

by

Alan M. Courtright

Volume IV
Annual Project Segment Report
Federal Aid in Wildlife Restoration
Project W-6-R-4, Work Plan L

The subject matter contained within these reports is often fragmentary in nature and the findings may not be conclusive; consequently, permission to publish the contents is withheld pending permission of the Department of Fish and Game.

(Printed January 1964)

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WORK PLAN SEGMENT REPORT
FEDERAL AID IN WILDLIFE RESTORATION

STATE: Alaska

PROJECT NO.: W-6-R-3 and 4 TITLE: Alaska Wildlife Investigations

WORK PLAN: L TITLE: Wildlife Data Collections

JOB NO.: 1 and 3

PERIOD COVERED: July 1, 1961 to June 30, 1963 (this report includes the results of a mailed hunter harvest postcard survey initiated under W-6-R-3, Work Plan L, Job No. 1).

ABSTRACT

Alaska's first attempt to obtain statewide hunter harvest information on all game species by means of a mailed questionnaire resulted in a surprisingly high return of 76 per cent from two mailings. One seventh (5,000) of the resident full-fee hunters were queried.

No stratification was employed in the sample; this undoubtedly introduced bias in the results, particularly recognizable in the caribou harvest which on the basis of the questionnaire was computed at 12,742 to 15,650 animals. Arctic hunters are known to vary widely in their individual takes of this species (from 0 to as many as 200) and since these hunters are poorly represented in the sample the questionnaire revealed little of value about the harvest of caribou in the Arctic. The total State harvest is estimated at 20,000 or more.

In other areas and for other species computed harvest data were adjudged quite reliable. Though the data did not lend themselves to thoroughgoing statistical analysis, computed harvests could in some instances be compared to known harvest data collected by other means, and most of the discrepancies were small. For example, the questionnaire indicated that a minimum of 637 sheep were taken in 1961 by resident full-fee licensees, which compares favorably with the known (from the highly successful sheep harvest tickets) 1962 total harvest of 666 by all licensees.

RECOMMENDATIONS

The mailed hunter survey should be repeated at intervals of no more than five years, unless harvest data on all important species are collected by more reliable methods.

Future postcard hunter harvest surveys should be stratified, and other groups of licensees in addition to the resident full-fee hunters should be included.

On mailed surveys the intervals between mailings should be reduced and standardized, and the first mailing should be completed as soon after January 1 as possible.

On the next mailed survey three mailings (i. e. two "reminders") should be tried and compared in effectiveness with subsequent two-mailing questionnaires.

The sheep harvest tickets should be continued. Similar harvest tickets should be required for moose in 1963 and perhaps other species at a later date.

WORK PLAN SEGMENT REPORT
FEDERAL AID IN WILDLIFE RESTORATION

STATE: Alaska

PROJECT NO.: W-6-R-3 and 4 TITLE: Alaska Wildlife Investigations

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JOB NOS.: 1 and 3

PERIOD COVERED: July 1, 1961 to June 30, 1963

OBJECTIVES

To develop techniques for determining the hunter harvest of game animals in Alaska.

TECHNIQUES

1. Returns from a postcard hunter questionnaire (Figure 1) mailed to five thousand license holders were analyzed. The hunters to be queried were selected by extracting every seventh license application from the files. The selection was confined to resident full-fee license holders, thus eliminating from the sample two categories of hunters who undoubtedly contributed substantially to the harvest of some species. These categories were: (1) nonresident hunters (including those who actually live in Alaska but had not yet become residents); and (2) the so-called subsistence license hunters. The questionnaires were mailed beginning in mid-March 1962, which, because of the method employed at that time for filing license applications, was the earliest possible date. A reminder was mailed to those persons who had not yet replied by mid-May. Returned cards were coded and processed by the Department's IBM section.

2. The 1962 hunting license applications were classified according to the Game Management Units in which the purchasers resided at the time of license purchase (excluding nonresidents who listed an address outside of Alaska). This gave some idea of the distribution of hunters in the State and was originally intended to serve as a basis for stratification on a survey to be conducted in 1963. It was later decided, however, that the survey need not be repeated so soon and therefore the classification of licenses served mainly to reflect hunter

Figure 1. The 1961 hunter harvest questionnaire postcard. The blank postcards with stamps attached were sent to licensees in envelopes.

ALASKA DEPARTMENT OF FISH AND GAME

1961 Hunter Questionnaire

Please fill out and mail **even if you did not hunt in 1961**. Information will **not** be used for enforcement purposes.

1. Did you hunt **BIG GAME** in Alaska in 1961? Yes No

If you hunted any of the species listed below, please list the **number** of each you killed by sex, and the Game Management Units in which they were taken.

Species	No. Males	No. Females	Game Management Units				
(1) Deer	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
(2) Caribou	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
(3) Goat	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
(4) Black Bear	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
(5) Moose	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
(6) Brown & Grizzly Bear	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
(7) Sheep	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
(8) Polar Bear	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

2. Did you hunt **SMALL GAME** in Alaska in 1961? Yes No

Form FG-107

If you hunted **SMALL GAME**, please list the **number** of each kind you killed, and the Units in which they were taken

Species	No.	Units	Species	No.	Units
(1) Ducks	<input type="text"/>	<input type="text"/>	(4) Grouse	<input type="text"/>	<input type="text"/>
(2) Geese	<input type="text"/>	<input type="text"/>	(5) Ptarmigan	<input type="text"/>	<input type="text"/>
(3) Cranes	<input type="text"/>	<input type="text"/>	(6) Hares & Rabbits	<input type="text"/>	<input type="text"/>

3. If you killed any species of either **BIG GAME** or **SMALL GAME** not listed above, please enter the kind and number of each and the Game Management Units in which they were taken.

Species	No. Males	No. Females	Game Mgt. Units
(1) _____	_____	_____	_____
(1) _____	_____	_____	_____
(1) _____	_____	_____	_____
(1) _____	_____	_____	_____

Your cooperation will help assure the future of your hunting.

distribution in the light of the 1962 survey.

3. A sheep harvest ticket (Figure 2 & 3) was utilized to determine the harvest of that species. Ten thousand tickets were made available for distribution through licensing officers and Department offices. All persons wishing to hunt sheep in 1962 were required to obtain these prenumbered tickets, which were issued without cost. Mailing of the postcard (report) portion of the ticket was mandatory within 30 days after the taking of a sheep. Unsuccessful hunters were required to mail this postcard portion by January 31, 1963.

To provide for the mailing of reminders, and to give an indication of the number of harvest tickets issued, the tickets were so constructed as to provide the Department with an overlay sheet bearing the hunter's name and address. To prevent issuance of duplicate harvest tickets, licensing officers and Department personnel issuing the tickets were directed to write the number of the harvest ticket on the reverse side of the applying hunter's license.

Reminders that the report portion of the tickets had to be mailed by January 31, whether the hunter was successful or not and whether he actually hunted sheep or not were mailed two weeks before this deadline. A second reminder, calling attention to the fact that reports were now overdue, was mailed two weeks after the deadline. News releases supplemented these reminders.

Some "successful" reports were received on which the hunter did not indicate where the sheep was taken. Queries were sent to these hunters and in all cases it was possible to assign the kill to a specific Game Management Unit on the basis of the area description supplied in reply to this query.

FINDINGS

Sheep Harvest Tickets

Prospective sheep hunters picked up 4,050 sheep harvest tickets. Of these 4,050 tickets, reports were received on 3,608, or 89.1 per cent of those issued, leaving 442, or 10.9 per cent, unreported. The 3,608 reports were returned by 2,281 (63.2%) hunters who reported that they did hunt and 1,327 (36.8%) who reported that they did not hunt. Of those

Figure 2. The 1962 Sheep Harvest Ticket, with overlay sheet removed.

SHEEP HARVEST TICKET 1962 No. 13701

Issued to _____ whose mailing
HUNTER'S NAME (PRINT)
 address is _____
ADDRESS (PRINT)

and whose hunting license number is _____

Issued by _____ at _____
NAME (PRINT) TOWN (PRINT)

Date issued _____, 1962
 Hunter must punch date immediately after taking sheep.

(PUNCH OUT CORRECT DATE)							DATE TAKEN	(PUNCH OUT CORRECT DATE)						
AUG. ○							SEPT. ○							
		1	2	3					1	2				
4	5	6	7	8	9	10	3	4	5	6	7	8		
11	12	13	14	15	16	17	9	10	11	12	13	14		
18	19	20	21	22	23	24	15	16	17	18	19	20		
25	26	27	28	29	30	31								

**THIS TAG MUST BE ATTACHED TO RECOGNIZABLE PORTION OF SHEEP BEFORE TRANSPORTING
 IF ISSUED TO A NON-RESIDENT OR TO A RESIDENT OVER 16, TICKET NO. MUST BE
 ENTERED ON HUNTING LICENSE**

**1962 No. 13701
 SHEEP HUNTING REPORT**

HUNTER'S NAME (PRINT)

1. Hunted sheep in 1962 but was unsuccessful
2. Did not hunt sheep
3. Killed a sheep in Game Management Unit

on ____/____/1962.
MO. DAY

This report must be filled out and mailed within 30 days if you kill a sheep, or by Jan. 31, 1963 if you intended to hunt but did not, or hunted but were unsuccessful.

DETACH POST CARD BEFORE AFFIXING TAG TO SHEEP

Figure 3. Overlay sheet from the 1962
Sheep Harvest Ticket.

SHEEP HARVEST TICKET 1962 No. 13701

Issued to _____ whose mailing
address is _____
and whose hunting license number is _____
Issued by _____ at _____
Date issued _____, 1962

**DETACH AND MAIL THIS OVERLAY SHEET TO ALASKA DEPT. OF FISH
AND GAME, SUBPORT BLDG., JUNEAU WITHIN 10 DAYS AFTER ISSUING
HARVEST TICKET.**

**IF HUNTER IS A NON-RESIDENT, OR IS A RESIDENT 16 YEARS OLD
OR OVER, HE MUST HAVE A HUNTING LICENSE TO OBTAIN THIS TICKET
AND YOU MUST WRITE THE NUMBER OF THIS TICKET ON THE BACK OF
HIS LICENSE IN INK, WITH YOUR INITIALS.**

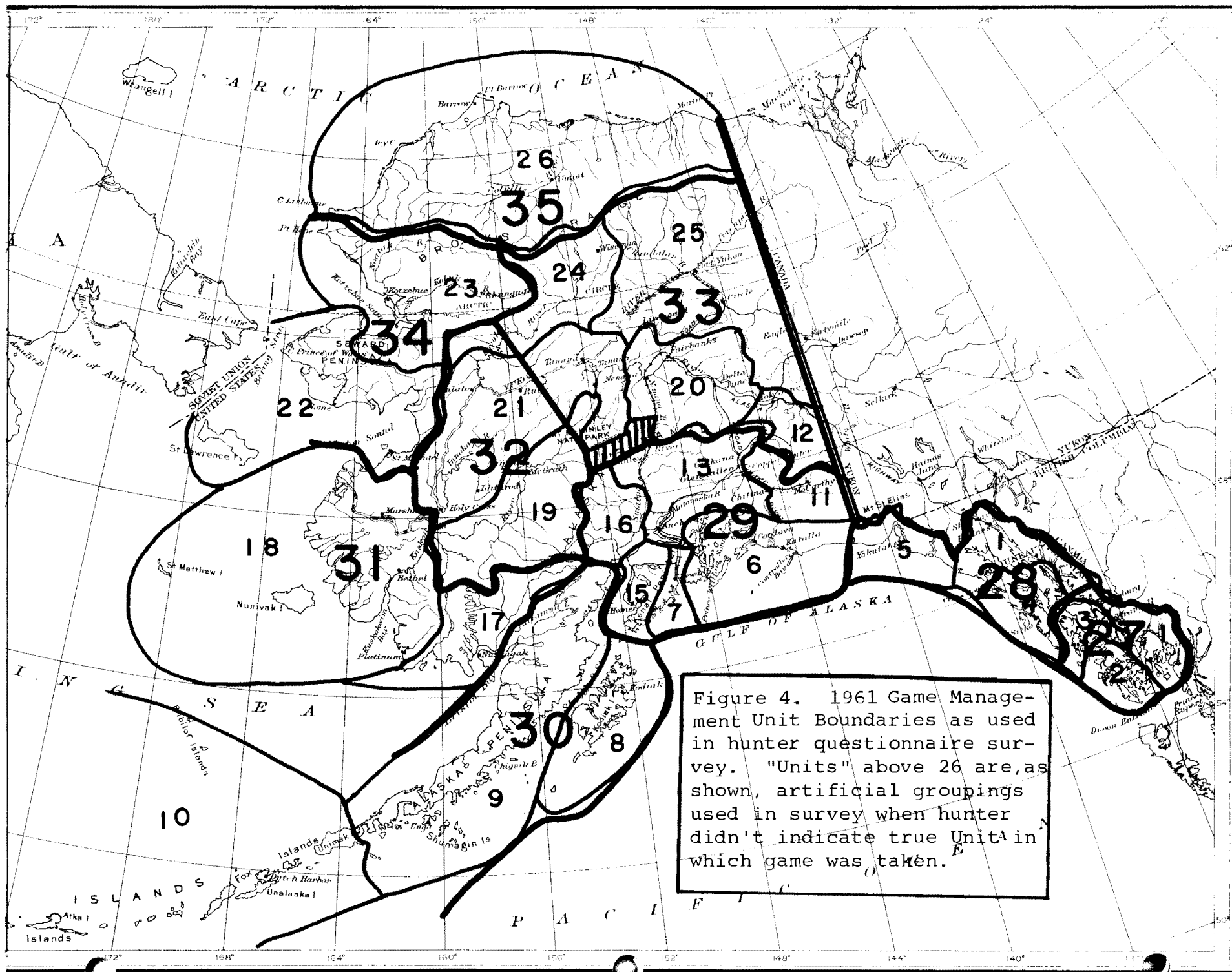


Figure 4. 1961 Game Management Unit Boundaries as used in hunter questionnaire survey. "Units" above 26 are, as shown, artificial groupings used in survey when hunter didn't indicate true Unit in which game was taken.

who hunted, 1,615, or 70.8 per cent, marked their reports "unsuccessful" while 666, or 29.2 per cent, of those who hunted reported that they took a sheep. The harvest of 666 animals was distributed as shown in Table 1.

Questionnaire Postcard

Of the five thousand questionnaires mailed, 139, or 9 per cent, were returned undelivered because the persons to whom they were addressed had moved without leaving a forwarding address, had given false or incomplete addresses, or for other reasons. Seven hundred and forty-seven (15%) of the hunters did not respond. Of the 3,814, or 76 per cent who returned the questionnaires, 2,616 (52%) did so on the first mailing while 1,198 (24%) returned them after a reminder had been mailed. Fourteen of the returns were discarded (treated as nonrespondents in the computations) as improperly completed. Returned cards received after September 1 were also discarded: a few cards were received as late as December 1962.

The delivery and return data from the questionnaire are summarized in Table 2.

Preliminary questions on the postcard were "1. Did you hunt big game in Alaska in 1961?"; and "2. Did you hunt small game in Alaska in 1961?" "Yes" and "No" boxes followed each of these questions. Replies to these two questions supplied data on hunting effort, as summarized in Table 3.

It will be noted from Table 3, item C, that the "Yes", "No", and "No answer" replies, when considering both of the above questions together, added up to only 33.5% of the total cards returned. This reflects the fact that a great many persons answered one or the other of the "Did you hunt" questions, but not both of them.

Table 3 also shows that three different bases could be used to compute the total Alaskan game harvest by resident, full-fee license holders, for:

1. 4,561 hunters were presumed contacted (5,000 minus the questionnaires returned undelivered);
2. 3,814 persons returned the questionnaires, with or without answers marked on them; and
3. 3,716 (big game) and 3,339 (small game) answered either

Table 1. Distribution of the 1962 sheep harvest as indicated by returned sheep harvest tickets.

Game Management Unit	Number of Sheep Reported Taken	Per Cent of Total Reported Harvest
7	15	2.3
11	117	17.3
12	92	13.8
13	107	16.1
14	99	14.9
15	35	5.3
16	4	0.6
17	9	1.4
19	24	3.6
20	74	11.1
23	7	1.1
24	38	5.7
25	12	1.8
26	28	4.2
Unknown	<u>6</u>	<u>1.0</u>
Total	666	100.2%

Table 2. Delivery and return data, 1961 hunter questionnaire.

1. Queries mailed.	5,000
2. No. of license applications from which selection was made.	35,000
3. Method of selection: every 7th application.	
4. Hunters responding:	
a. Responding to 1st mailing	2,616 (52%)
b. Responding after 2nd mailing	<u>1,198 (24%)</u>
Total Response	3,814 (76%)
5. Hunters not responding	747 (15%)
6. Cards returned undelivered	439 (9%)

Table 3. Hunting effort by the 3,814 persons who returned questionnaires.

A. Big Game

1. Checked "Yes"* to "Did you hunt big game?"	
a. 1st mailing	1,765 or 67.5% of replies to 1st mailing
b. 2nd mailing	774 or 64.6% of replies to 2nd mailing
Total "Yes" replies	<u>2,539 or 66.6% replies</u>
2. Checked "No" to "Did you hunt big game?"	
a. 1st mailing	789 or 30.2% of replies to 1st mailing
b. 2nd mailing	388 or 32.4% of replies to 2nd mailing
Total "No" replies	<u>1,177 or 30% of replies</u>
3. Did not reply to question "Did you hunt big game?" and did not, in other portion of questionnaire, indicate that game was taken.*	
a. 1st mailing	62 or 2.4% of replies to 1st mailing
b. 2nd mailing	36 or 3.0% of replies to 2nd mailing
	<u>98 or 2.6% of replies</u>

B. Small Game

1. Checked "Yes"* to "Did you hunt small game?"	
a. 1st mailing	956 or 36.5% of replies to 1st mailing
b. 2nd mailing	349 or 29.1% of replies to 2nd mailing
Total "Yes" replies	<u>1,305 or 34.2% of replies</u>
2. Checked "No" to "Did you hunt small game?"	
a. 1st mailing	1,339 or 51.2% of replies to 1st mailing
b. 2nd mailing	695 or 58.0% of replies to 2nd mailing
Total "No" replies	<u>2,034 or 53.3% of replies</u>

Table 3 cont.

3. Did not reply to question "Did you hunt small game?" and did not, in other portion of questionnaire, indicate that small game was taken.*		
a. 1st mailing	324 or 12.4% of replies	to 1st mailing
b. 2nd mailing	154 or 12.9% of replies	to 2nd mailing
Total "No" answers	<u>474 or 12.4% of replies</u>	

C. Big Game and Small Game Together

1. Replied "Yes" to both "Did you hunt?" questions.		
a. 1st mailing	729 or 27.9% of replies	to 1st mailing
b. 2nd mailing	240 or 20.0% of replies	to 2nd mailing
Total "Yes" replies	<u>969 or 25.4% of replies</u>	

2. Replied "No" to both "Did you hunt?" questions.		
a. 1st mailing	182 or 7.0% of replies	to 1st mailing
b. 2nd mailing	93 or 7.8% of replies	to 2nd mailing
Total "No" replies	<u>275 or 7.2% of replies</u>	

3. Did not answer either "Did you hunt?" question and did not, in other portion of questionnaire, indicate that both big game and small game were taken.*		
a. 1st mailing	17 or 0.6% of replies	to 1st mailing
b. 2nd mailing	18 or 1.5% of replies	to 2nd mailing
Total "No answers"	<u>35 or 0.9% of replies</u>	

* If there was no answer given to these questions, but the respondent indicated taking animals of the proper category, the "Yes" boxes were checked on receipt and treated as original "Yes" replies.

"yes" or "no" to the respective "Did you hunt" questions (or indicated taking one or more animals, thus providing an automatic "Yes" answer even though there was no "X" in the box provided).

The use of any particular one of the above figures to compute the total harvest by resident full-fee license holders would entail certain assumptions. For example, if the deer harvest were computed:

1. by dividing the number of deer reported taken (1,427) on returned questionnaires by the number of persons presumed contacted (4,561) and multiplying the result by the number of licensees (35,000) from which the sample was drawn, the result is an extrapolated harvest of 10,950 deer. Asserting that this is the total number of deer taken in 1961 by resident full-fee license holders involves the assumptions that (1) the persons (747) who presumably received the questionnaires but did not return them did not take any deer, and (2) those persons (98) who did not reply to the "Did you hunt big game" question actually did not hunt (or if they hunted, didn't take anything). The latter assumption would have only a minor effect on the computed total harvest of deer or any other species:
2. by dividing the number of deer reported taken by the number of persons who returned the questionnaire (3,814) and multiplying by 35,000--giving a computed harvest of 13,095--it must be assumed that those who did not give a "Yes" or "No" answer did not take any game, and that those who did not return the questionnaire hunted--and were successful--in the same proportion as those who did reply.
3. by dividing the deer reported taken by the number of persons (3,716) who supplied a "Yes" or "No" answer and multiplying by 35,000 (giving a computed harvest of 13,440) the necessary assumptions are that (1) the persons who presumably received the questionnaires but did not return them hunted and were successful in the same proportion as those who did report, and (2) the persons who did not give a "Yes" or "No" answer actually did include some persons who did hunt and did take deer, but perhaps just couldn't figure how

to complete the questionnaire. Obviously the latter assumption is unsound: those who didn't check "Yes" or "No" more likely assumed it would be obvious they didn't hunt, or hunted and didn't take anything, if all the rest of the spaces were also left blank.

The first assumption made above--that persons who didn't reply to the questionnaire took no game--is probably unlikely also. While it has been observed in surveys conducted elsewhere that unsuccessful hunters are less likely to respond than successful ones, it will be seen from Table 3 that there is but slight difference in hunting effort between hunters who responded to the first mailing and those who required a reminder. There is obviously some difference, as is further borne out by Table 4, showing hunter success on big game. Nevertheless, it is probable that hunters who did not return the questionnaire did take some game. The computed harvests by Game Management Unit (and in some other tables), which are computed using the number of hunters contacted as a base, can therefore be regarded as being absolute minimums. A comparison of harvests computed on the three above-mentioned bases appears in Table 5.

No attempt has been made to correlate the distribution of the harvest with the distribution of hunters by residence (Table 8). The latter were obtained from 1962, not 1961, license applications and were intended for use in stratifying a 1962 questionnaire which was not carried out.

Table 4. Hunter success on big game in 1961, as computed from the number of persons (2,539) who answered "Yes" (or indicated taking game) to the question "Did you hunt big game in Alaska in 1961?"

1. Took no big game		
a. 1st mailing	439 or 24.9% of "Yes" answers on 1st mailing	
b. 2nd mailing	458 or 59.2% of "Yes" answers on 2nd mailing	
Total	<u>897 or 35.3% of "Yes" answers</u>	
2. Took one species of big game		
a. 1st mailing	726 or 41.1% of "Yes" answers on 1st mailing	
b. 2nd mailing	271 or 35.0% of "Yes" answers on 2nd mailing	
Total	<u>997 or 39.3% of "Yes" answers</u>	
3. Took two species of big game		
a. 1st mailing	533 or 30.2% of "Yes" answers on 1st mailing	
b. 2nd mailing	28 or 3.6% of "Yes" answers on 2nd mailing	
Total	<u>561 or 22.1% of "Yes" answers</u>	
4. Took three species of big game		
a. 1st mailing	62 or 3.5% of "Yes" answers on 1st mailing	
b. 2nd mailing	9 or 1.2% of "Yes" answers on 2nd mailing	
Total	<u>71 or 2.8% or "Yes" answers</u>	
5. Took four or more species of big game		
a. 1st mailing	9 or 0.5% of "Yes" answers on 1st mailing	
b. 2nd mailing	3 or 0.4% of "Yes" answers on 2nd mailing	
Total	<u>12 or 0.5% of "Yes" answers</u>	

Table 5. Comparison of computed 1961 big game harvest by resident full-fee licensees, using three different methods of computation.

Species	Using the number of persons contacted (4,561) as the sample sized	Using the number of persons who returned the questionnaire (3,814) as the sample size	Using the number of persons who returned the questionnaire with positive answers* (3,716) as the sample size.
Deer	10,950	13,095	13,441
Caribou	12,752	15,252	15,654
Goat	506	606	622
Black Bear	1,143	1,367	1,403
Moose	7,811	9,342	9,588
Brown & Grizzly	368	430	452
Sheep	637	762	782
Polar Bear	38	46	47

*i. e. Those who answered either "Yes" or "No" to the question "Did you hunt big game in Alaska in 1961?" Ninety-eight persons returned cards without answering this question, and without, in another portion of the questionnaire, indicating that they took one or more big game animals (thus providing an automatic "Yes" answer).

Table 6. Computed minimum 1961 game harvests by resident full-fee license holders, by Game Management Units. The computation formula is:

$$\text{Harvest} = \frac{\text{Number of species reported taken}}{\text{Number of persons contacted}} \times 35,000$$

A. Big Game

UNIT	DEER			MOOSE		
	Male	Female	Total	Male	Female	Total
1	2,003	736	2,739	130		130
2	783	238	1,021	8		8
3	1,535	490	2,025	31		31
4	2,256	1,074	3,330		8	8
5	54	53	107	69		69
6	453	222	675	15	8	23
7	8		8	253	31	284
8	238	54	292			
9				176	77	253
10						
11				8		8
12				77		77
13				1,059	15	1,074
14				1,458	445	1,903
15				1,075	414	1,489
16				269	92	361
17				146	8	153
18				77		77
19					130	130
20				668	23	691
21				176		176
22				38		38
23				46		46
24				77		77
25				215		215
26				15		15
27*	153	77	230			
28*	230	85	315	8		8
29*		15	15	192	99	291
30*						
31*						
32*						
33*				115		115
34*						
35*						
36*	<u>153</u>	<u>39</u>	<u>192</u>	<u>61</u>	<u>61</u>	<u>61</u>
Totals	7,866	3,083	10,949	6,462	1,350	7,811

Table 6 (cont.)

A. Big Game

UNIT	CARIBOU			GOAT			SHEEP
	Male	Female	Total	Male	Female	Total	Total
1				138	84	222	
2				8		8	
3							
4				8	8	16	
5							
6	8		8	31	15	46	
7				31		31	15
8							
9	268	100	368				
10							
11	54	15	69				54
12	54	23	77				46
13	4,175	2,916	7,091	8		8	123
14	215	153	368	69	53	122	115
15		8	8	15		15	69
16	38	38	76				
17	69	23	92				
18							
19	31	8	38				23
20	138	92	230				46
21	38	15	53				
22	23	15	38				
23	836	253	1,090				8
24	169	77	245				8
25	821	668	1,489				15
26	714	115	829				23
27*				8	8	16	
28*							
29*	199	146	345	8		8	54
30*							
31*							
32*							
33*	92	84	176				23
34*							
35*							
36*	<u>31</u>	<u>31</u>	<u>62</u>	<u>15</u>		<u>15</u>	<u>15</u>
Totals	7,973	4,780	12,752	339	168	507	637

Table 6 (cont.)

A. Big Game

UNIT	BLACK BEAR			BR. & GRIZZLY BEAR			POLAR BEAR		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
1	69	15	84						
2	7	8	15						
3	8	7	15						
4	15		15	23	8	31			
5	15		15	8		8			
6	23		23	8		8			
7	31		31						
8				38	8	46			
9	15		15	69		69			
10									
11	8		8	8		8			
12	8		8	8		8			
13	61		61	15		15			
14	161	46	207	8		8			
15	130	23	153						
16	38	23	61	8		8			
17				38		38			
18									
19	53	8	61	8		8			
20	115	8	123	23	8	31			
21	61	15	77						
22									
23	23	8	31	23		23			
24	8		8	8		8			
25	46	23	69	15		15			
26	8		8		8	8			
27*									
28*									
29*	15		15	8	7	15			
30*									
31*									
32*									
33*	15		15						
34*									
35*									
36*	<u>15</u>		<u>15</u>	<u>8</u>		<u>8</u>	<u>31</u>	<u>8</u>	<u>39</u>
Totals	948	184	1143	324	39	363	31	8	39

Table 6. (cont.)

B. Small Game

UNIT	HARES & RABBIT	GEESE	DUCKS	PTARMIGAN	CRANES	GROUSE
1	560	827	5,000	406		1,070
2	130	130	1,880	38		169
3	77	529	2,530	25		253
4	31	260	2,160	77		246
5	8	54	745	54		38
6	483	635	4,030	338		391
7	1,170	306	1,590	2,880		2,210
8	1,230	8	2,280	330		
9	598	2,130	3,570	5,080	8	1,950
10		100	199	150		107
11	123		107	23		391
12	1,680	146	1,340	384	8	1,260
13	2,020	15	1,740	9,370		3,780
14	2,260	299	11,200	4,220	38	6,650
15	912	15	1,940	2,240		6,740
16	107	77	2,120	583	15	729
17	284	560	814	1,570		3,520
18	452	844	1,120	1,810	8	414
19	982	15	361	945	8	797
20	28,200	513	8,770	6,100	54	10,500
21	4,110	452	1,750	682		1,730
22	529	299	1,190	5,100	23	
23	484	130	583	495		46
24	529	38	100	522		84
25	3,820	61	422	921		1,630
26	1,070	69	637	1,070		314
27*						
28*		38	384			8
29*	192	23	254	107		138
30*			2			
31*						
32*						
33*	238		25			299
34*						
35*						
36*	975	192	1,170	430	15	675
Totals	53,200	8,510	60,300	45,800	176	45,139

* Unit numbers above 26 are arbitrary divisions of the state used when a hunter didn't report the Unit in which the animal was taken (see Figure 4). The "Unit No." assigned to these was based on the post-mark or, in a few cases, on a note written by the hunter giving the general area where the animal was taken. Divisions 27 to 35 are shown in Figure 4. Division 36 (the numbers were assigned for IBM coding purposes) is the entire state (i.e. location unknown).

Table 7. Harvest, harvest participation, and hunter success by 1961 resident full-fee license holders.

A. Big Game

Species	Computed Min. Total Number Animals Taken by Licensees*	Male	Female	Per Cent of Licensees* Who Took Species	Per Cent Success of Licensees* Who Hunted Big Game	Computed Total Number of Persons* Taking Species	Ave. No. Taken by Hunters Who Took Speci
Deer	10,950	7,866	3,083	11	20	3,950	2.7
Caribou	12,752	7,981	4,772	16	28	5,520	2.3
Goat	506	322	184	1		420	1.2
Black Bear	1,143	952	192	1	2	982	1.1
Moose	7,811	6,592	1,120	22	39	7,600	1.0
Brown & Grizzly Bear	368	322	46	1	2	368	1.0
Sheep	637	637		2	3	608	1.0
Polar Bear	38	31	8	less than 1	less than 1	38	1.0

* Resident full-fee licensees only.

Table 7. (Cont.)

B. Small Game

Species	Computed Min. Total Number Animals Taken ¹ by Licensees*	Per Cent of Licensees* Who took Species ²	Per Cent Success of Licensees* Who Hunted Small Game ³	Computed Total Number of Persons* Taking Species	Ave. No. Taken by Hunters Who Took Species
Cranes	184	less than 1	1	115	1.5
Geese	8,500	5	17	1,750	4.9
Ducks	60,000	14	48	4,800	12.5
Grouse	45,000	13	44	4,400	10.3
Ptarmigan	46,000	10	33	3,300	13.7
Hares & Rabbits	53,000	11	37	3,700	14.3

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1. Computed Harvest = $\frac{\text{Numbers of animals reported}}{\text{Number of persons contacted (4561)}} \times \frac{\text{Total number of regular hunting licensees (35,000)}}{\text{Total number of regular hunting licensees (35,000)}}$

2. Per Cent of Licensees Who Took Species = $\frac{\text{Reported number of hunters taking a species}}{\text{Number of persons contacted (4561)}} \times 100$

3. Computed % of Success = $\frac{\text{Reported number of hunters who took a particular species}}{\text{Number of persons who reported hunting that category (big or small game)}} \times 100$

* Resident full-fee licensees only.

Table 8. Distribution of hunters by area of residence as indicated by 1962 license stubs.

Game Management Unit	Resident Full-Fee Licensees	Nonresidents Giving Alaska Address	Subsistence Licensees	Total
1	5,529	266	73	5,868
2	147	10	60	217
3	1,006	36	27	1,069
4	1,347	49	92	1,488
5	138	21	5	164
6	618	62	46	726
7	650	16	9	675
8	1,046	190	2	1,238
9	515	42	23	580
10	138	13	--	151
11	30	--	7	37
12	230	10	73	313
13	344	10	77	431
14	14,712	682	134	15,528
15	1,876	59	32	1,967
16	17	5	28	50
17	350	8	13	371
18	504	21	468	993
19	186	17	142	345
20	6,426	540	165	7,131
21	224	20	175	419
22	412	12	207	631
23	320	10	250	580
24	111	4	11	126
25	166	8	187	361
26	<u>157</u>	<u>4</u>	<u>85</u>	<u>246</u>
Totals	37,199	2,115	2,391	41,705

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