

**Nuiqsut Caribou Subsistence Monitoring Project:
Year 8 Supplemental Data Deliverable**

Prepared for
ConocoPhillips Alaska, Inc.

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INTRODUCTION

This document is associated with the eighth annual report of the Nuiqsut Caribou Subsistence Monitoring Project (SRB&A 2017). The purpose of the Nuiqsut Caribou Subsistence Monitoring Project is to document the impacts of CD4 and other COP satellite developments on Nuiqsut residents' caribou hunting activities. The monitoring project is an ongoing, multi-year program meant to measure impacts and changes over time. While previous monitoring reports for this study have included lengthier explanations and analysis of the data supported by harvester observations, the Year 8 report was treated as a summary report with selected data tables and figures. This deliverable contains Year 8 data tables and figures not available in the Year 8 abridged report for the Nuiqsut Caribou Subsistence Monitoring Project.

YEAR 8 DATA TABLES AND FIGURES

Methods

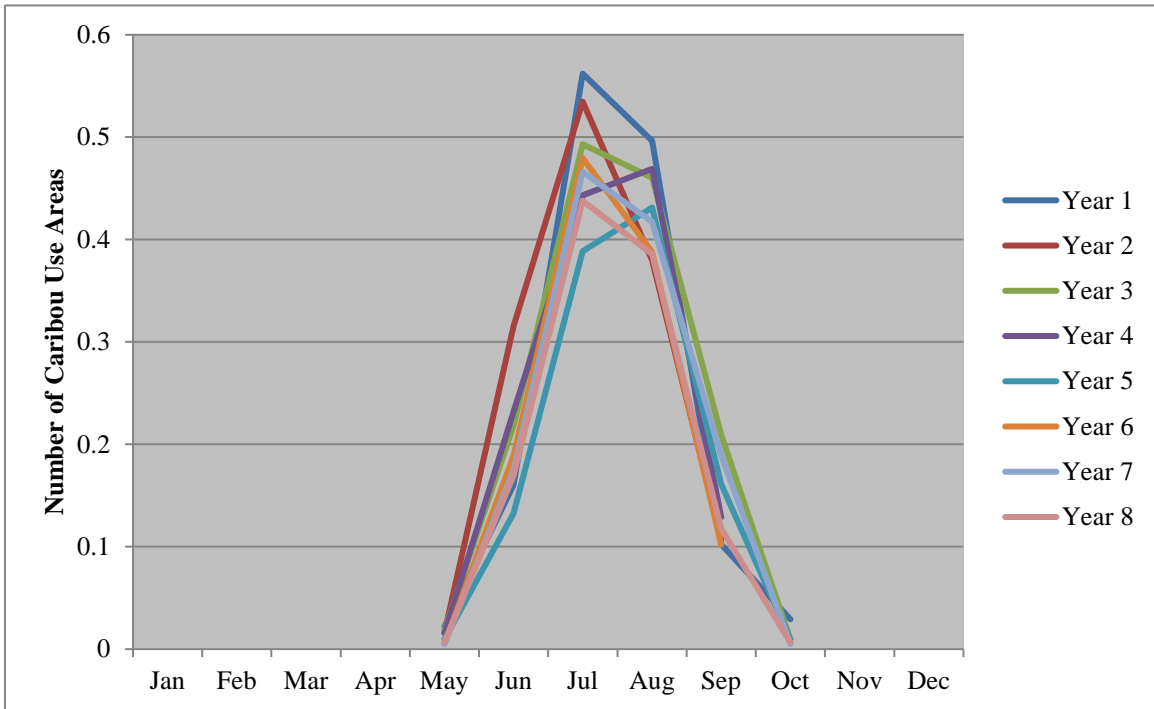
Table 1: Nuiqsut Datasets, Years 1-8

Nuiqsut Dataset Component	Number of Records							
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8
Active harvester respondent characteristics (age, residence duration, place of birth)	36	53	57	58	57	57	60	58
Subsistence use areas	137	187	215	194	211	196	206	153
Harvest locations	182	152	196	162	195	143	248	173
Observations of changes in harvest patterns	36	53	57	58	56	57	57	58
Observations of changes in condition of caribou	87	67	71	68	83	51	67	72
Impacts on harvest activities	111	109	81	72	102	107	87	83
Number of Active Harvester Respondents	36	53	57	58	57	57	60	58

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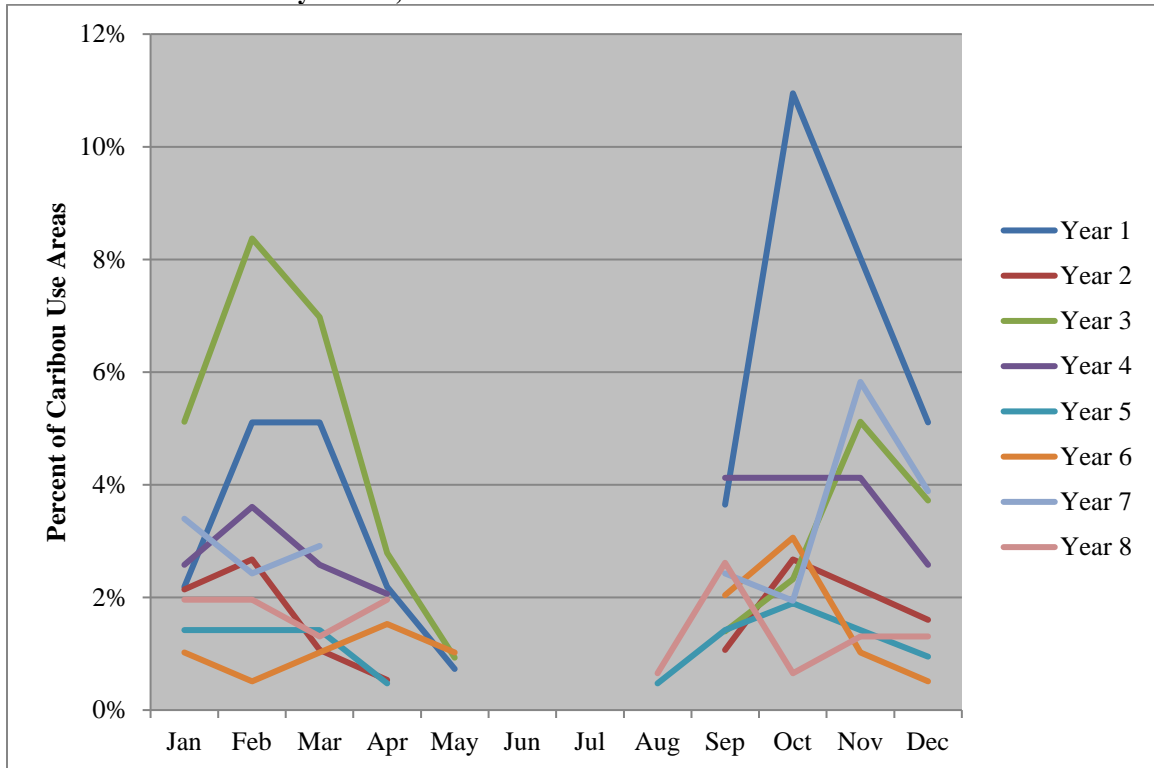
Characteristics of Caribou Use Areas and Harvest Sites

Figure 1: Boat Use by Month, Years 1-8



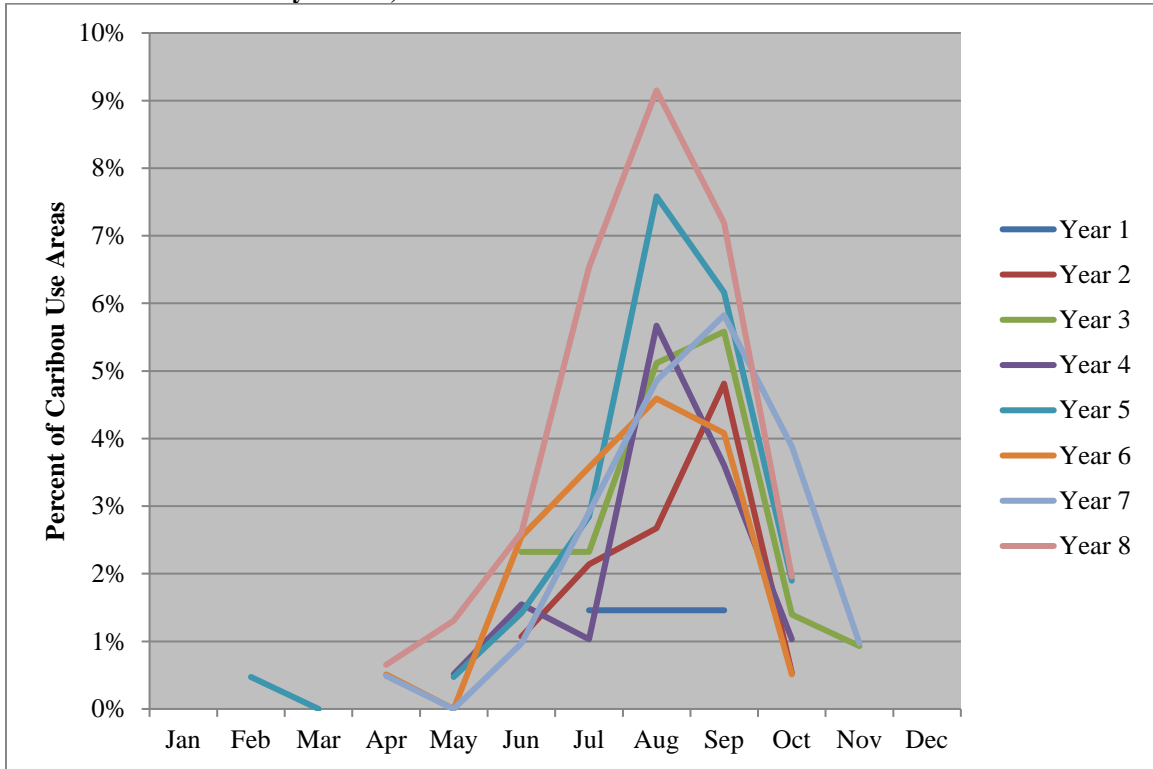
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Figure 2: Snowmachine Use by Month, Years 1-8



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Figure 3: Four-wheeler Use by Month, Years 1-8



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Table 2: Number of Caribou Harvested by Number of Harvest Locations, Years 1-8

Number of Caribou Harvested	Number (%) of Harvest Locations							
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8
1	95 (52%)	75 (49%)	99 (51%)	85 (52%)	120 (62%)	66 (46%)	105 (42%)	86 (50%)
2	44 (24%)	48 (32%)	60 (31%)	40 (25%)	40 (21%)	42 (29%)	77 (31%)	46 (27%)
3	19 (10%)	16 (11%)	22 (11%)	12 (7%)	16 (8%)	24 (17%)	23 (9%)	13 (8%)
4	7 (4%)	8 (5%)	7 (4%)	14 (9%)	9 (5%)	8 (6%)	26 (10%)	12 (7%)
5	13 (7%)	4 (3%)	5 (3%)	4 (2%)	4 (2%)	1 (1%)	6 (2%)	6 (3%)
6	1 (1%)	1 (1%)	2 (1%)	2 (1%)	4 (2%)	1 (1%)	5 (2%)	2 (1%)
7	2 (1%)	0 (0%)	0 (0%)	1 (1%)	0 (0%)	1 (1%)	1 (<1%)	1 (1%)
8	0 (0%)	0 (0%)	0 (0%)	2 (1%)	0 (0%)	0 (0%)	2 (1%)	1 (1%)
9	0 (0%)	0 (0%)	0 (0%)	1 (1%)	1 (1%)	0 (0%)	0 (0%)	1 (1%)
10	0 (0%)	0 (0%)	0 (0%)	1 (1%)	0 (0%)	0 (0%)	1 (<1%)	1 (1%)
11	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (1%)	0 (0%)	0 (0%)	2 (1%)
12	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (<1%)	0 (0%)
15	1 (1%)	0 (0%)	1 (1%)	0 (0%)	0 (0%)	0 (0%)	1 (<1%)	1 (1%)
20	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (1%)

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Table 3: Caribou Hunting Longest Trip Duration, Years 1-8

Typical Duration	Percentage of Caribou Use Areas							
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8
More than 2 weeks	1%	2%	0%	0%	1%	2%	1%	0%
1-2 Weeks	3%	6%	4%	3%	2%	2%	2%	2%
2-6 Nights	20%	24%	12%	12%	11%	14%	9%	10%
1 Night	6%	5%	4%	4%	2%	8%	4%	3%
Same Day	70%	63%	80%	81%	85%	74%	85%	86%
Total	100%	100%	100%	100%	100%	100%	100%	100%
Number of Use Areas	97	163	211	193	208	196	188	153

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Table 4: Caribou Group Size Noted at Caribou Harvest Locations, Years 5-8

Estimated Herd Size	Percent of Harvest Locations				Percent of Caribou Harvested			
	Year 5	Year 6	Year 7	Year 8	Year 5	Year 6	Year 7	Year 8
1000-2000	2%	1%	1%	1%	3%	1%	1%	4%
500-999	1%	3%	1%	4%	0%	5%	1%	5%
100-499	3%	10%	9%	9%	10%	15%	15%	12%
81-99	0%	0%	0%	0%	0%	0%	1%	0%
71-80	1%	0%	1%	1%	1%	0%	1%	2%
61-70	1%	0%	0%	0%	2%	0%	1%	0%
51-60	2%	1%	2%	2%	3%	1%	1%	3%
41-50	2%	2%	3%	1%	4%	3%	4%	1%
31-40	1%	2%	2%	3%	0%	2%	3%	12%
21-30	1%	3%	4%	4%	2%	5%	5%	5%
11-20	13%	11%	14%	11%	14%	14%	17%	11%
2-10	41%	38%	42%	44%	42%	39%	42%	35%
1	34%	29%	20%	20%	19%	16%	9%	9%
Total Number	176	138	234	160	311	267	503	340

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Observations of Changes in Harvest Patterns

Table 5: Type of Change in Harvest Amount Compared to Previous Year, Years 1-8

Type of Harvest Amount Change	Percentage of Respondents							
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8
Harvest More	11%	15%	21%	17%	9%	9%	30%	16%
Harvest Less	64%	70%	47%	55%	45%	54%	53%	41%
Harvest the Same	25%	15%	32%	28%	46%	37%	18%	43%
Number of Respondents	36	53	57	58	56	57	57	52

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Table 6: Reasons for Decrease in Harvest Amount, Nuiqsut, Years 1-8

Causes	Number and Percent of Observations								
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	All Years
Personal Factors Total	9	10	16	22	6	14	14	17	108
	26%	26%	47%	52%	17%	38%	36%	68%	38%
Personal Reasons	0	3	3	7	1	6	2	3	25
Lack of Transportation/Equipment	2	1	3	4	0	3	3	3	19
Take Fewer Trips	0	1	6	1	2	0	4	3	17
Change in Subsistence Providers	1	1	2	4	2	1	1	2	14
Employment/Lack of Time	1	2	2	4	0	2	0	2	13
Change in Subsistence Dependents	3	2	0	2	0	0	0	1	8
Need Less	2	0	0	0	0	0	2	2	6
Use Area Changed	0	0	0	0	0	2	0	0	2
Increased Cost of Living/Expenses	0	0	0	0	0	0	1	0	1
Change in Transportation Method	0	0	0	0	0	0	1	0	1
Smaller Hunting Area	0	0	0	0	1	0	0	0	1
Sharing Less	0	0	0	0	0	0	0	1	1
Resource Distribution or Migration Total	12	18	10	8	15	15	16	5	99
	35%	46%	29%	19%	43%	41%	41%	20%	35%
Resource Availability	8	9	2	4	9	10	7	5	54
Migration Changed or Diverted	3	5	0	0	1	2	4	0	15
Farther from Riversides/Farther Inland	0	2	4	0	2	2	3	0	13
Change in Distribution / Migration	0	1	0	3	1	0	0	0	5
Moved Out of Area	0	0	3	1	0	0	0	0	4
Farther from Community	0	1	0	0	0	0	2	0	3
Resource in Smaller Groups	1	0	0	0	0	0	0	0	1
Earlier Migration/Arrival	0	0	1	0	0	0	0	0	1
Later Migration/Arrival	0	0	0	0	1	0	0	0	1
Move to Different Areas	0	0	0	0	1	0	0	0	1
Timing of Migration	0	0	0	0	0	1	0	0	1
	9	3	2	3	9	3	3	0	32
Development Activities Total	26%	8%	6%	7%	26%	8%	8%	0%	11%
Helicopter Traffic Disturbance	4	0	0	2	5	2	2	0	15
Development	2	1	2	0	0	0	1	0	6
Airplane Traffic Disturbance	2	1	0	1	1	0	0	0	5
Air Traffic	1	0	0	0	2	0	0	0	3
Traffic Disturbance	0	0	0	0	0	1	0	0	1
Off Road Vehicles Disturbance	0	0	0	0	1	0	0	0	1
Oil Drilling	0	1	0	0	0	0	0	0	1
	0	2	1	5	1	0	0	0	9
Don't Know Total	0%	5%	3%	12%	3%	0%	0%	0%	3%
I Do Not Know	0	2	1	5	1	0	0	0	9
Environmental Factors Total	0	3	2	1	1	1	0	0	8

Causes	Number and Percent of Observations								
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	All Years
	0%	8%	6%	2%	3%	3%	0%	0%	3%
Change in Food Availability	0	2	0	0	0	0	0	0	2
Climate Affecting Travel	0	0	0	1	0	0	0	0	1
Wind	0	0	1	0	0	0	0	0	1
More Rain	0	0	0	0	1	0	0	0	1
Predators	0	0	1	0	0	0	0	0	1
Increase in Predators	0	1	0	0	0	0	0	0	1
New Species in Region	0	0	0	0	0	1	0	0	1
Hunting Success - General Total	3	0	2	0	0	1	2	0	8
	9%	0%	6%	0%	0%	3%	5%	0%	3%
Worse Success	0	0	1	0	0	1	2	0	4
More Difficult	2	0	0	0	0	0	0	0	2
Reduced Harvest Opportunities	0	0	1	0	0	0	0	0	1
Travel Farther to Harvest Resource	1	0	0	0	0	0	0	0	1
Competition or Hunting Pressure Total	0	1	0	1	0	3	0	1	6
	0%	3%	0%	2%	0%	8%	0%	4%	2%
Competition with Sport Hunters	0	0	0	0	0	2	0	0	2
Sport Hunting and Fishing	0	0	0	1	0	0	0	0	1
Sport Hunting Methods Disturbing Migration Routes	0	1	0	0	0	0	0	0	1
Hunting Pressure	0	0	0	0	0	1	0	0	1
Overharvesting by Sport Hunters / Fishermen	0	0	0	0	0	0	0	1	1
Resource Behavior Total	0	0	1	0	2	0	0	1	4
	0%	0%	3%	0%	6%	0%	0%	4%	1%
Skittish Behavior in Species	0	0	1	0	2	0	0	1	4
Development Infrastructure Total	1	1	0	0	1	0	0	0	3
	3%	3%	0%	0%	3%	0%	0%	0%	1%
Pipeline	1	1	0	0	0	0	0	0	2
Oil Field Infrastructure	0	0	0	0	1	0	0	0	1
Resource Abundance Total	0	0	0	0	0	0	2	1	3
	0%	0%	0%	0%	0%	0%	5%	4%	1%
Decrease in Species Number	0	0	0	0	0	0	2	1	3
Contamination Concerns Total	0	1	0	0	0	0	1	0	2
	0%	3%	0%	0%	0%	0%	3%	0%	1%
Contamination from Air Pollution	0	1	0	0	0	0	1	0	2
Resource Health Total	0	0	0	1	0	0	1	0	2
	0%	0%	0%	2%	0%	0%	3%	0%	1%
Disease/Infection	0	0	0	0	0	0	1	0	1
Concern of Disease/Infection	0	0	0	1	0	0	0	0	1
Other Total	0	0	0	1	0	0	0	0	1
	0%	0%	0%	2%	0%	0%	0%	0%	0%
Miscellaneous	0	0	0	1	0	0	0	0	1
Grand Total	34	39	34	42	35	37	39	25	285

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Table 7: Reasons Given for Increase in Harvest Amount, Nuiqsut, Years 1-8

Causes	Number and Percent of Observations								
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	All Years
Personal Factors Total	4	6	6	7	2	1	10	3	39
	80%	75%	50%	58%	50%	33%	59%	38%	57%
Personal Reasons	2	2	1	5	0	0	2	0	12
Take More Trips	1	3	2	0	0	0	4	2	12
Better Transportation/Equipment	0	0	1	0	0	1	2	1	5
Change in Subsistence Dependents	1	0	1	1	1	0	0	0	4
Change in Subsistence Providers	0	0	1	1	1	0	0	0	3
Sharing More	0	0	0	0	0	0	2	0	2
Need More	0	1	0	0	0	0	0	0	1
Resource Distribution or Migration Total	1	2	5	4	2	2	3	3	22
	20%	25%	42%	33%	50%	67%	18%	38%	32%
Resource Availability	0	2	2	4	2	1	2	1	14
Closer to Community	1	0	0	0	0	0	1	2	4
Moved into Area	0	0	2	0	0	0	0	0	2
Travel Farther to Harvest Resource	0	0	0	0	0	1	0	0	1
Migration Changed or Diverted	0	0	1	0	0	0	0	0	1
Don't Know Total	0	0	0	1	0	0	2	0	3
	0%	0%	0%	8%	0%	0%	12%	0%	4%
I Do Not Know	0	0	0	1	0	0	2	0	3
Hunting Success - General Total	0	0	1	0	0	0	1	2	4
	0%	0%	8%	0%	0%	0%	6%	25%	6%
Better Success	0	0	1	0	0	0	1	2	4
Resource Health Total	0	0	0	0	0	0	1	0	1
	0%	0%	0%	0%	0%	0%	6%	0%	1%
Increase in Resource Size	0	0	0	0	0	0	1	0	1
Grand Total	5	8	12	12	4	3	17	8	69

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Table 8: Type of Change in Trip Frequency, Nuiqsut, Years 1-8

Type of Trip Frequency Change	Percentage of Respondents							
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8
Take More Trips	25%	36%	32%	24%	27%	25%	30%	25%
Take Fewer Trips	25%	42%	33%	34%	36%	42%	40%	42%
Take Same Number of Trips	50%	23%	35%	41%	38%	33%	30%	33%
Number of Respondents	36	53	57	58	56	57	57	52

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Table 9: Reasons for Increase in Trip Frequency, Years 1-8

Causes	Number and Percent of Observations								
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	All Years
Personal Factors Total	1	6	16	9	10	8	13	5	68
	8%	35%	80%	60%	63%	47%	76%	50%	55%
Personal Reasons	0	6	7	7	5	3	6	3	37
Better Transportation/Equipment	0	0	7	2	1	2	5	1	18
Need More	0	0	2	0	1	0	1	0	4
Sharing More	1	0	0	0	0	2	0	0	3
Change in Subsistence Providers	0	0	0	0	2	0	0	0	2
Change in Transportation Method	0	0	0	0	0	0	1	1	2
Change in Subsistence Dependents	0	0	0	0	0	1	0	0	1
Use Area Changed	0	0	0	0	1	0	0	0	1
Resource Distribution or Migration Total	6	7	4	4	4	7	2	3	37
	50%	41%	20%	27%	25%	41%	12%	30%	30%
Resource Availability	4	7	2	4	3	6	2	2	30
Migration Changed or Diverted	2	0	0	0	0	0	0	0	2
Moved out of Area	0	0	1	0	1	0	0	0	2
Moved into Area	0	0	1	0	0	0	0	0	1
Farther from Riversides/Farther Inland	0	0	0	0	0	1	0	0	1
Farther from Community	0	0	0	0	0	0	0	1	1
Development Activities Total	3	2	0	0	2	1	1	0	9
	25%	12%	0%	0%	13%	6%	6%	0%	7%
Traffic Disturbance	1	1	0	0	0	1	0	0	3
Development	2	1	0	0	0	0	0	0	3
Helicopter Traffic Disturbance	0	0	0	0	1	0	1	0	2
Airplane Traffic Disturbance	0	0	0	0	1	0	0	0	1
Don't Know Total	0	1	0	1	0	0	0	0	2
	0%	6%	0%	7%	0%	0%	0%	0%	2%
I Do Not Know	0	1	0	1	0	0	0	0	2
Environmental Factors Total	0	0	0	1	0	1	0	0	2
	0%	0%	0%	7%	0%	6%	0%	0%	2%
Weather	0	0	0	1	0	0	0	0	1
Increase in Predators	0	0	0	0	0	1	0	0	1
Competition or Hunting Pressure Total	0	1	0	0	0	0	0	0	1
	0%	6%	0%	0%	0%	0%	0%	0%	1%
Competition with Sport Hunters	0	1	0	0	0	0	0	0	1
Development Infrastructure Total	1	0	0	0	0	0	0	0	1
	8%	0%	0%	0%	0%	0%	0%	0%	1%
Pipeline	1	0	0	0	0	0	0	0	1
Economic Factors Total	1	0	0	0	0	0	0	1	2
	8%	0%	0%	0%	0%	0%	0%	10%	2%
Mitigation Funds	1	0	0	0	0	0	0	1	2
Resource Behavior Total	0	0	0	0	0	0	1	0	1
	0%	0%	0%	0%	0%	0%	6%	0%	1%
Skittish Behavior in Species	0	0	0	0	0	0	1	0	1
Hunting Success - General	0	0	0	0	0	0	0	1	1
	0%	0%	0%	0%	0%	0%	0%	10%	1%
Reduced Harvest Opportunities	0	0	0	0	0	0	0	1	1
Grand Total	12	17	20	15	16	17	17	10	124

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Table 10: Reasons for Decrease in Trip Frequency, Years 1-8

Causes	Number and Percent of Observations								
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	All Years
Personal Factors Total	9	16	19	22	17	21	18	20	142
	90%	80%	95%	88%	71%	75%	67%	83%	80%
Personal Reasons	2	2	8	10	8	10	4	6	50
Employment/Lack of Time	3	3	5	7	4	6	9	4	41
Lack of Transportation/Equipment	4	10	6	5	4	2	2	7	40
Change in Subsistence Providers	0	0	0	0	1	1	1	2	5
Better Transportation/Equipment	0	0	0	0	0	1	1	0	2
Change in Transportation Method	0	0	0	0	0	0	1	0	1
Need Less	0	1	0	0	0	0	0	0	1
Change in Subsistence Dependents	0	0	0	0	0	1	0	1	2
Resource Distribution or Migration Total	0	4	1	1	3	3	4	1	17
	0%	20%	5%	4%	13%	11%	15%	4%	10%
Resource Availability	0	4	0	0	2	3	2	1	12
Farther from Community	0	0	0	0	0	0	1	0	1
Closer to Community	0	0	0	0	0	0	1	0	1
Change in Distribution/Migration	0	0	0	0	1	0	0	0	1
Moved into Area	0	0	0	1	0	0	0	0	1
Moved out of Area	0	0	1	0	0	0	0	0	1
Economic Factors Total	0	0	0	0	1	4	2	2	9
	0%	0%	0%	0%	4%	14%	7%	8%	5%
Increased Cost of Living/Expenses	0	0	0	0	1	4	2	2	9
Don't Know Total	0	0	0	2	1	0	1	0	4
	0%	0%	0%	8%	4%	0%	4%	0%	2%
I Do Not Know	0	0	0	2	1	0	1	0	4
Environmental Factors Total	1	0	0	0	0	0	2	0	3
	10%	0%	0%	0%	0%	0%	7%	0%	2%
Shallower Rivers/Lakes	0	0	0	0	0	0	1	0	1
Wind	0	0	0	0	0	0	1	0	1
Less Snow	1	0	0	0	0	0	0	0	1
Development Activities Total	0	0	0	0	1	0	0	1	2
	0%	0%	0%	0%	4%	0%	0%	4%	1%
Development	0	0	0	0	1	0	0	0	1
Disturbance	0	0	0	0	0	0	0	1	1
Development Infrastructure Total	0	0	0	0	1	0	0	0	1
	0%	0%	0%	0%	4%	0%	0%	0%	1%
Oil Field Infrastructure	0	0	0	0	1	0	0	0	1
Grand Total	10	20	20	25	24	28	27	24	178

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Table 11: Type of Change in Trip Duration, Nuiqsut, Years 1-8

Type of Trip Duration Change	Percentage of Respondents							
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8
Take Longer Trips	33%	25%	9%	12%	13%	16%	19%	8%
Take Shorter Trips	6%	8%	12%	7%	11%	11%	19%	20%
Take Same Duration Trips	61%	68%	79%	81%	77%	74%	61%	72%
Number of Respondents	36	53	57	58	56	57	57	50

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Table 12: Reasons for Taking Longer Trips, Years 1-8

Causes	Number and Percent of Observations								
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	All Years
Resource Distribution or Migration Total	10	5	1	4	4	8	8	1	41
	63%	56%	20%	57%	57%	73%	73%	25%	59%
Resource Availability	4	3	0	3	2	6	4	0	22
Farther from Riversides/Farther Inland	0	1	0	0	1	2	4	0	8
Travel Farther to Harvest Resource	1	1	1	1	1	0	0	1	6
Migration Changed or Diverted	5	0	0	0	0	0	0	0	5
Personal Factors Total	0	3	3	3	3	3	3	2	20
	0%	33%	60%	43%	43%	27%	27%	50%	29%
Personal Reasons	0	3	3	3	1	1	3	2	16
Better Transportation/Equipment	0	0	0	0	1	1	0	0	2
Sharing More	0	0	0	0	0	1	0	0	1
Change in Transportation Method	0	0	0	0	1	0	0	0	1
Hunting Success - General Total	1	0	1	0	0	0	0	0	2
	6%	0%	20%	0%	0%	0%	0%	0%	3%
More Difficult	1	0	0	0	0	0	0	0	1
Worse Success	0	0	1	0	0	0	0	0	1
Development Activities Total	5	0	0	0	0	0	0	0	5
	31%	0%	0%	0%	0%	0%	0%	0%	7%
Helicopter Traffic Disturbance	2	0	0	0	0	0	0	0	2
Airplane Traffic Disturbance	2	0	0	0	0	0	0	0	2
Development	1	0	0	0	0	0	0	0	1
Economic Factors Total	0	1	0	0	0	0	0	1	2
	0%	11%	0%	0%	0%	0%	0%	25%	3%
Increased Cost of Living/Expenses	0	1	0	0	0	0	0	1	2
Grand Total	16	9	5	7	7	11	11	4	70

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Table 13: Reasons for Taking Shorter Trips, Years 1-8

Causes	Number and Percent of Observations								
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	All Years
Personal Factors Total	2	2	6	3	5	3	2	2	25
	100%	100%	86%	60%	56%	50%	22%	20%	50%
Personal Reasons	1	0	5	2	4	1	0	1	14
Employment/Lack of Time	1	1	0	0	1	1	1	0	5
Lack of Transportation/Equipment	0	1	1	1	0	1	0	0	4
Change in Transportation Method	0	0	0	0	0	0	1	0	1
Better Transportation/Equipment	0	0	0	0	0	0	0	1	1
Resource Distribution or Migration Total	0	0	1	1	2	1	3	5	13
	0%	0%	14%	20%	22%	17%	33%	50%	26%
Resource Availability	0	0	1	1	2	1	2	3	10
Farther from Riversides/Farther Inland	0	0	0	0	0	0	1	0	1
Harvest Resource Closer to Community	0	0	0	0	0	0	0	1	1
Closer to Shore	0	0	0	0	0	0	0	1	1
Economic Factors Total	0	0	0	0	1	2	2	2	7
	0%	0%	0%	0%	11%	33%	22%	20%	14%
Increased Cost of Living/Expenses	0	0	0	0	1	2	2	2	7
Environmental Factors Total	0	0	0	0	1	0	1	1	3
	0%	0%	0%	0%	11%	0%	11%	10%	6%
Weather	0	0	0	0	0	0	1	0	1
More Rain	0	0	0	0	1	0	0	0	1
Rain	0	0	0	0	0	0	0	1	1
Don't Know Total	0	0	0	1	0	0	0	0	1
	0%	0%	0%	20%	0%	0%	0%	0%	2%
I Do Not Know	0	0	0	1	0	0	0	0	1
Hunting Success - General	0	0	0	0	0	0	1	0	1
	0%	0%	0%	0%	0%	0%	11%	0%	2%
Better Success	0	0	0	0	0	0	1	0	1
Grand Total	2	2	7	5	9	6	9	10	50

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Table 14: Type of Change in Use Area, Nuiqsut, Years 1-8

Type of Use Area Change	Percentage of Respondents							
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8
Use Area Changed	6%	19%	14%	29%	29%	28%	16%	15%
Smaller Hunting Area	11%	0%	11%	0%	4%	0%	4%	8%
Expanded Use Area	0%	0%	7%	0%	4%	11%	7%	2%
Travel Farther to Harvest Resource	14%	4%	5%	2%	0%	0%	0%	6%
Utilizing New or Different Areas	0%	0%	2%	0%	0%	0%	2%	6%
Changing of Timing of Hunt	0%	2%	0%	0%	0%	2%	0%	0%
Personal Reasons	0%	2%	0%	0%	0%	0%	0%	0%
Take Fewer Trips	0%	2%	0%	0%	0%	0%	0%	0%
Change in Harvest Methods	0%	0%	0%	2%	0%	0%	0%	0%
Move to Different Areas	0%	2%	0%	0%	0%	0%	0%	0%
No Change in Use Area	69%	70%	61%	67%	64%	60%	72%	63%
Number of Respondents	36	53	57	58	56	57	57	52

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Table 15: Reasons Given for a Change in Use Area, Years 1-8

Causes	Number and Percent of Observations								
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	All Years
Personal Factors Total	4	4	19	15	13	12	8	7	82
	24%	25%	83%	68%	46%	44%	40%	37%	48%
Personal Reasons	1	1	10	11	6	3	2	4	38
Lack of Transportation/Equipment	2	2	5	4	3	4	2	2	24
Better Transportation/Equipment	0	0	4	0	1	3	1	1	10
Change in Transportation Method	0	0	0	0	1	0	3	0	4
Employment/Lack of Time	1	1	0	0	0	2	0	0	4
Change in Subsistence Providers	0	0	0	0	1	0	0	0	1
Smaller Hunting Area	0	0	0	0	1	0	0	0	1
Resource Distribution or Migration Total	6	7	2	2	12	8	4	4	45
	35%	44%	9%	9%	43%	30%	20%	21%	26%
Resource Availability	1	2	0	1	4	8	3	3	22
Migration Changed or Diverted	4	2	0	0	1	0	0	0	7
Change in Distribution/Migration	0	1	0	1	3	0	0	1	6
Farther from Community	0	1	0	0	1	0	0	0	2
Moved Out of Area	0	0	2	0	0	0	0	0	2
Closer to Community	0	0	0	0	0	0	1	0	1
Harvest Resource Closer to Community	0	0	0	0	1	0	0	0	1
Move to Different Areas	0	1	0	0	0	0	0	0	1
Farther from Shore	0	0	0	0	1	0	0	0	1
Moved into Area	0	0	0	0	1	0	0	0	1
Farther from Riversides/Farther Inland	1	0	0	0	0	0	0	0	1
Environmental Factors Total	1	3	2	4	2	2	3	4	21
	6%	19%	9%	18%	7%	7%	15%	21%	12%
Shallower Rivers/Lakes	0	0	1	3	0	1	2	1	8
River Channel Changed	0	0	0	0	0	1	0	3	4
Wind	0	1	0	0	0	0	1	0	2
Climate Affecting Travel	0	2	0	0	0	0	0	0	2
Climate	0	0	0	0	1	0	0	0	1
Less Snow	1	0	0	0	0	0	0	0	1
Warmer Temperatures	0	0	0	0	1	0	0	0	1
Water Quality	0	0	0	1	0	0	0	0	1
Weather	0	0	1	0	0	0	0	0	1
Development Activities Total	4	1	0	1	1	5	3	2	17
	24%	6%	0%	5%	4%	19%	15%	11%	10%
Development	1	1	0	1	1	1	2	0	7
Helicopter Traffic Disturbance	1	0	0	0	0	1	1	0	3
Traffic Disturbance	1	0	0	0	0	2	0	0	3
Disturbance	0	0	0	0	0	0	0	2	2
Airplane Traffic Disturbance	1	0	0	0	0	0	0	0	1
Air Traffic	0	0	0	0	0	1	0	0	1
Don't Know	0	0	0	0	0	0	1	2	3
	0%	0%	0%	0%	0%	0%	5%	11%	2%
I Do Not Know	0	0	0	0	0	0	1	2	3
Development Infrastructure Total	2	0	0	0	0	0	0	0	2
	12%	0%	0%	0%	0%	0%	0%	0%	1%
Pipeline	1	0	0	0	0	0	0	0	1
Ice Roads	1	0	0	0	0	0	0	0	1
Economic Factors Total	0	1	0	0	0	0	1	0	2
	0%	6%	0%	0%	0%	0%	5%	0%	1%
Increased Cost of Living/Expenses	0	1	0	0	0	0	1	0	2
Grand Total	17	16	23	22	28	27	20	19	172

Table 16: Type of Change in Months of Harvest by Type of Change, Nuiqsut, Years 1-8

Type of Hunting Month Change	Percentage of Respondents							
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8
Later Hunting Season	11%	0%	5%	0%	0%	0%	2%	2%
Earlier Hunting Season	0%	0%	0%	0%	2%	2%	2%	2%
Harvest Season Changed	8%	15%	7%	21%	20%	16%	7%	14%
Harvest Season Same	81%	85%	88%	79%	79%	82%	89%	82%
Number of Respondents	36	53	57	58	56	57	57	50

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Table 17: Reasons Given for a Change in Harvest Season, Years 1-8

Causes	Number and Percent of Observations								
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	All Years
Personal Factors Total	4	5	5	12	8	7	4	7	52
	57%	63%	71%	86%	67%	70%	67%	88%	72%
Lack of Transportation/Equipment	2	2	2	3	6	3	1	0	19
Personal Reasons	0	2	0	7	1	1	2	4	17
Employment/Lack of Time	2	0	1	2	0	1	0	0	6
Better Transportation/Equipment	0	0	2	0	1	0	0	0	3
Need More	0	0	0	0	0	1	1	1	3
Change in Subsistence Dependents	0	1	0	0	0	0	0	1	2
Change in Subsistence Providers	0	0	0	0	0	1	0	0	1
Need Less	0	0	0	0	0	0	0	1	1
Resource Distribution or Migration Total	3	2	2	1	2	1	1	0	12
	43%	25%	29%	7%	17%	10%	17%	0%	17%
Resource Availability	0	2	1	0	2	1	1	0	7
Later Migration/Arrival	3	0	0	0	0	0	0	0	3
Change in Distribution/Migration	0	0	0	1	0	0	0	0	1
Moved Out of Area	0	0	1	0	0	0	0	0	1
Environmental Factors Total	0	0	0	0	2	1	0	0	3
	0%	0%	0%	0%	17%	10%	0%	0%	4%
Climate	0	0	0	0	1	0	0	0	1
Harsh Winter	0	0	0	0	1	0	0	0	1
Weather	0	0	0	0	0	1	0	0	1
Development Activities Total	0	1	0	0	0	0	0	0	1
	0%	13%	0%	0%	0%	0%	0%	0%	1%
Airplane Traffic Disturbance	0	1	0	0	0	0	0	0	1
Don't Know Total	0	0	0	1	0	0	1	0	2
	0%	0%	0%	7%	0%	0%	17%	0%	3%
I Do Not Know	0	0	0	1	0	0	1	0	2
Hunting Success - General Total	0	0	0	0	0	1	0	0	1
	0%	0%	0%	0%	0%	10%	0%	0%	1%
Better Success	0	0	0	0	0	1	0	0	1
Development Infrastructure	0	0	0	0	0	0	0	1	1
	0%	0%	0%	0%	0%	0%	0%	13%	1%
Ice Roads	0	0	0	0	0	0	0	1	1
Grand Total	7	8	7	14	12	10	6	8	72

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Observations of Harvested Caribou Health and Condition

Table 18: Types of Observed Abnormalities, Nuiqsut, Years 1-8

Observed Abnormality	Number of Observations								
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	All Years
Disease/Infection	24	12	13	20	29	7	17	16	138
Decrease in Resource Size	36	9	12	12	33	6	10	14	132
Change in Smell of Meat	2	1	0	5	6	1	0	5	20
Change in Texture of Meat	0	3	0	4	8	1	0	3	19
Fewer Parasites	10	0	7	0	0	0	0	0	17
Increase in Resource Size	5	0	4	0	0	0	0	0	9
Physical Abnormalities	0	3	0	0	1	0	0	4	8
More Parasites	3	0	1	3	1	0	0	0	8
Parasites	0	5	0	0	0	0	0	0	5
Injured Resource	0	0	0	0	0	4	0	0	4
Taste	1	0	0	0	1	1	0	0	3
Resource Injury	0	0	0	0	0	0	2	0	2
Change in Resource Quality	0	0	2	0	0	0	0	0	2
Resource Appears Unhealthy	0	0	0	0	1	1	0	0	2
New Species in Region	0	1	0	0	0	0	0	0	1
Abnormal Resource Death	1	0	0	0	0	0	0	0	1
Less Fat	1	0	0	0	0	0	0	0	1
Fur Less Thick	0	0	0	0	0	0	1	0	1

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Impacts on Harvesting Activities

Figure 4: Reported Helicopter Impacts on Caribou Harvest Activities by Month: Years 1-8

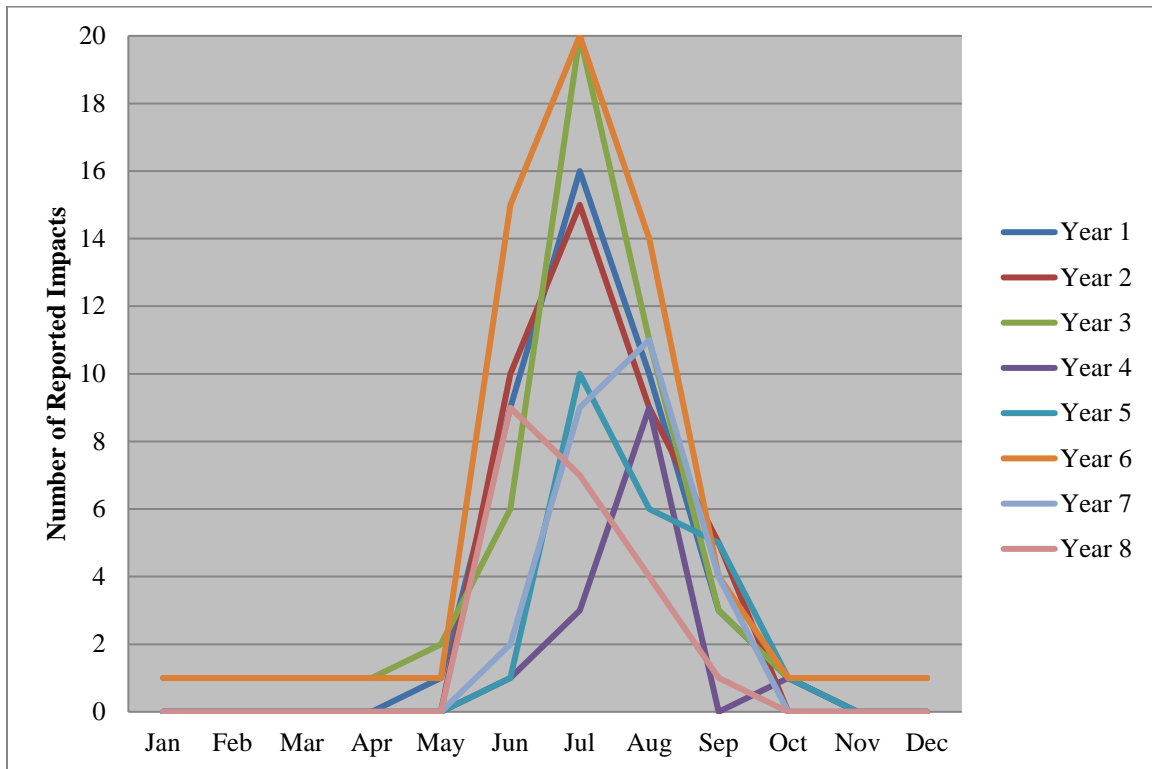


Figure 5: Reported Airplane Impacts on Caribou Harvest Activities by Month: Years 1-8

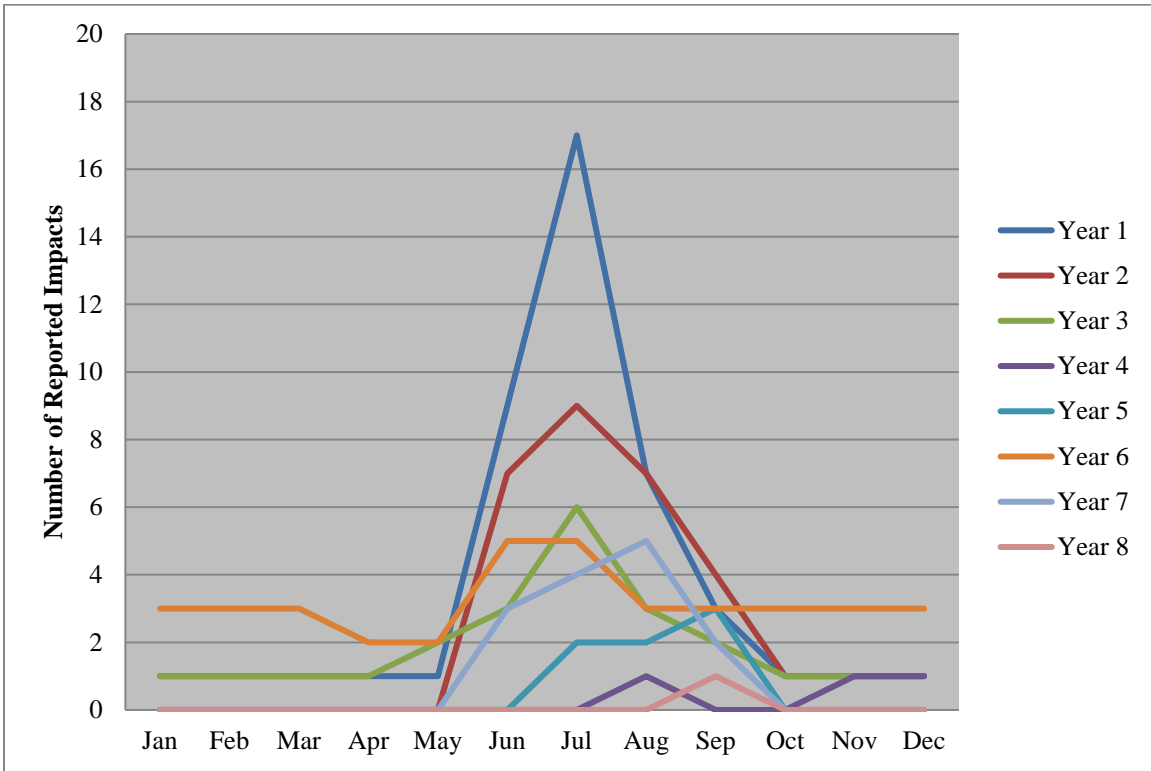


Figure 6: Reported Other Traffic Impacts on Caribou Harvest Activities by Month: Years 1-8

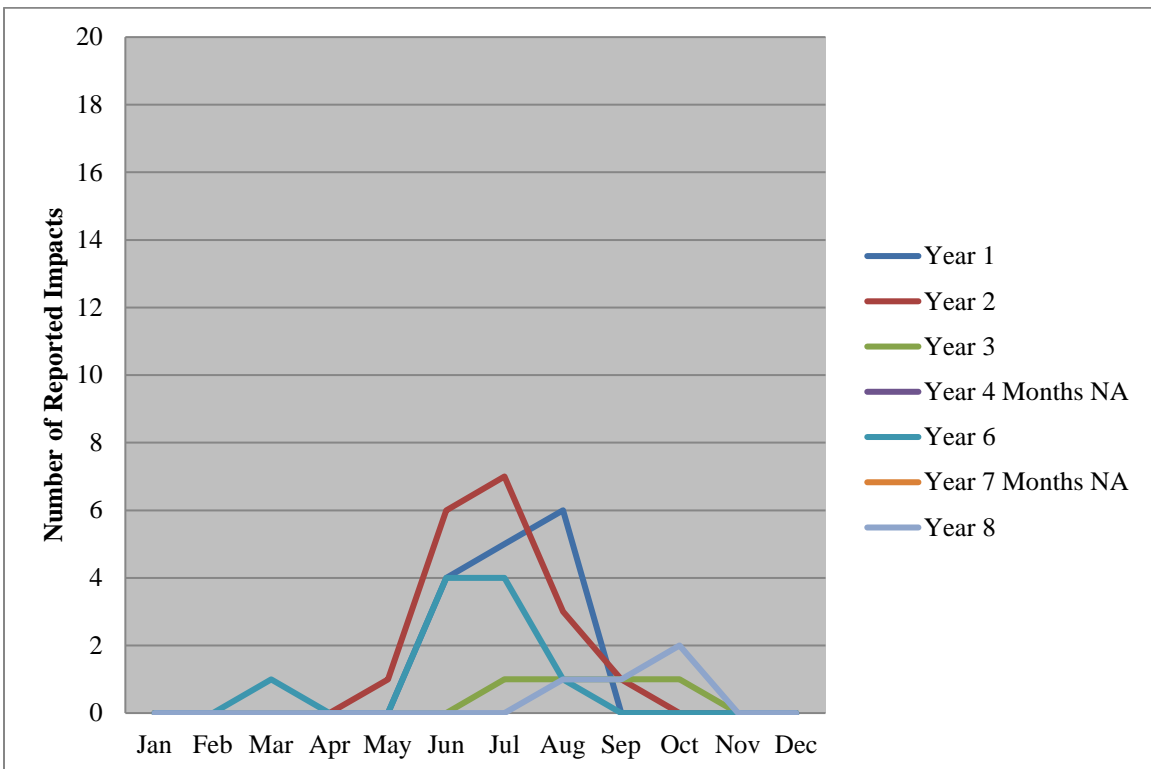


Figure 7: Reported Oil Company Personnel Impacts on Caribou Harvest Activities by Month: Years 1-8

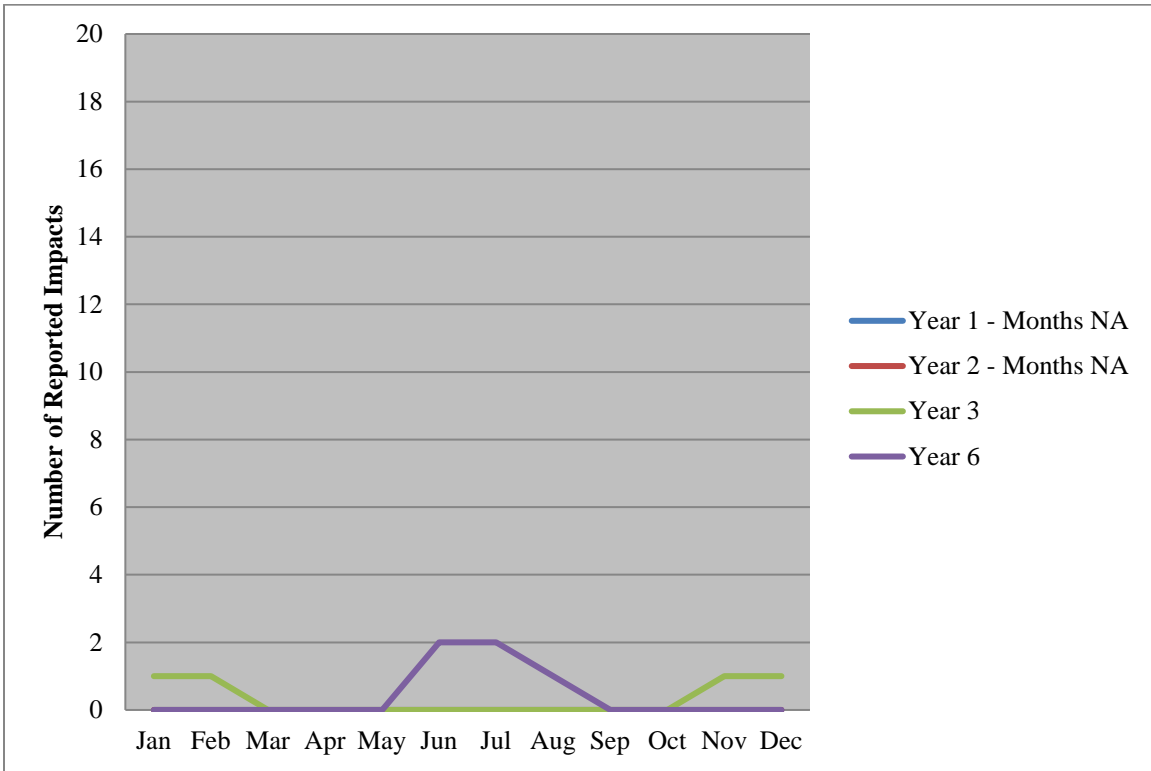


Figure 8: Reported Man-Made Structure Impacts on Caribou Harvest Activities by Month: Years 1-8

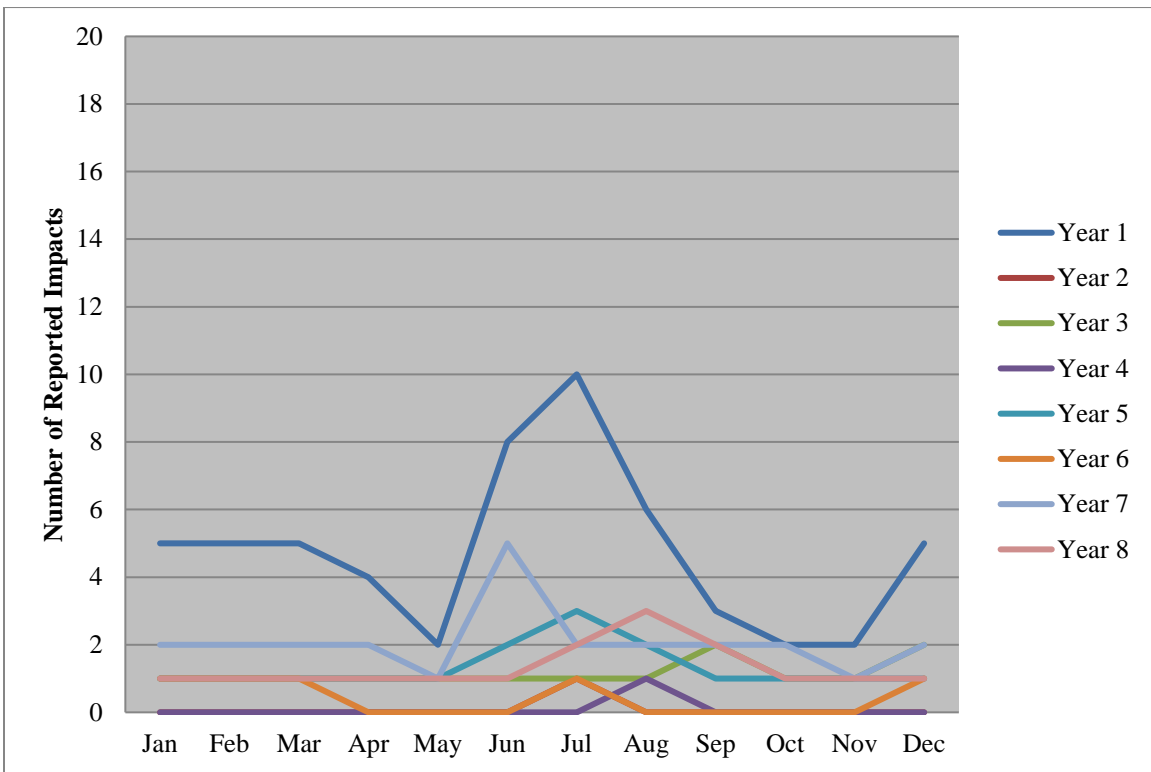


Table 19: Respondent Descriptions of Helicopters Associated with Impacts, Nuiqsut, Years 3-8

Helicopter Descriptions	Number of Observations						
	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	All Years
Blue and White Helicopter	8	6	10	9	5	1	39
Helicopters - Unknown Owner	9	7	4	9	6	4	39
Alpine Helicopter	4	0	5	6	5	6	26
Air Logistics Helicopter	4	0	2	3	0	1	10
Conoco Phillips Helicopter	1	0	0	0	1	2	4
Helicopter, Blue	0	1	0	0	1	2	4
Helicopter, Blue and Orange	0	1	0	1	0	0	2
Red Helicopter	1	0	0	0	0	0	1
Red and Black Helicopter	0	0	0	1	0	0	1
Yellow Helicopter	0	0	0	0	1	0	1
Other Oil Company Helicopter	0	0	0	1	0	0	1
Airplane - Unknown Owner	0	0	0	1	0	0	1
Green and White Helicopter	0	0	0	0	1	0	1
Total	27	15	21	31	20	16	130

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Table 20: Descriptions of Airplanes Associated with Airplane Traffic Impacts, Nuiqsut, Years 3-8

Airplane Descriptions	Number of Observations						
	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	All Years
Airplane - Unknown Owner	2	3	0	3	2	0	10
Alpine Airplane	0	1	2	2	4	0	9
Cargo Airplane	4	1	1	2	0	1	9
Twin Otter	1	0	2	0	0	0	3
Shared Services Airplane	0	0	2	0	0	0	2
Cessna	1	0	0	0	0	0	1
Supercub	0	0	0	1	0	0	1
Yellow Airplane	1	0	0	0	0	0	1
Total	9	5	7	8	6	1	36

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Braund, Stephen R. & Associates (SRB&A). 2017. Nuiqsut Caribou Subsistence Monitoring Project: Results of Year 8 Hunter Interviews and Household Harvest Surveys. Final Report, Abridged. Prepared for ConocoPhillips Alaska, Inc. Anchorage, Alaska.