

Caribou Management Report and Plan, Game Management Units 7 and 15:

Report Period 1 July 2017–30 June 2022, and
Plan Period 1 July 2022–30 June 2027

Jason Herreman



Caribou Management Report and Plan, Game Management Units 7 and 15:

Report Period 1 July 2017–30 June 2022, and
Plan Period 1 July 2022–30 June 2027

PREPARED BY:

Jason Herreman
Assistant Area Wildlife Biologist

APPROVED BY:

Jeff Selinger
Management Coordinator

REVIEWED BY:

Nick Fowler
Area Wildlife Biologist

PUBLISHED BY:

June C. Younkings
Publications Coordinator

©2025 Alaska Department of Fish and Game

Alaska Department of Fish and Game
Division of Wildlife Conservation
PO Box 115526
Juneau, AK 99811-5526



Hunters are important founders of the modern wildlife conservation movement. They, along with trappers and sport shooters, provided funding for this publication through payment of federal taxes on firearms, ammunition, and archery equipment, and through state hunting license and tag fees. These taxes and fees fund the federal Wildlife Restoration Program and the State of Alaska's Fish and Game Fund, which provided funding for the work reported on in this publication.

Species management reports and plans provide information about species that are hunted or trapped and management actions, goals, recommendations for those species, and plans for data collection. Detailed information is prepared for each species every 5 years by the area management biologist for game management units in their areas, who also develops a plan for data collection and species management for the next 5 years. This type of report is not produced for species that are not managed for hunting or trapping or for areas where there is no current or anticipated activity. Unit reports are reviewed and approved for publication by regional management coordinators and are available to the public via the Alaska Department of Fish and Game's public website.

This species management report and plan was reviewed and approved for publication by Jeff Selinger, Management Coordinator for Region II for the Division of Wildlife Conservation.

Species management reports and plans are available via the Alaska Department of Fish and Game's public website (www.adfg.alaska.gov) or by contacting Alaska Department of Fish and Game's Division of Wildlife Conservation, PO Box 115526, Juneau, AK 99811-5526; phone: (907) 465-4190; email: dfg.dwc.publications@alaska.gov. The report may also be accessed through most libraries, via interlibrary loan from the Alaska State Library or the Alaska Resources Library and Information Services (www.arlis.org). To subscribe to email announcements regarding new technical publications from the Alaska Department of Fish and Game, Division of Wildlife Conservation please use the following link: <http://list.state.ak.us/mailman/listinfo/adfgwildlifereport>.

This document, published in PDF format only, should be cited as:

Herreman, J. 2025. Caribou management report and plan, Game Management Units 7 and 15: Report period 1 July 2017–30 June 2022, and plan period 1 July 2022–30 June 2027. Alaska Department of Fish and Game, Species Management Report and Plan ADF&G/DWC/SMR&P-2025-9, Juneau.

Please contact the authors or the Division of Wildlife Conservation at (907) 465-4190 if you have questions about the content of this report.

The State of Alaska is an Affirmative Action/Equal Opportunity Employer. The Alaska Department of Fish and Game complies with Title II of the Americans with Disabilities Act of 1990. This document is available in alternative communication formats. If you need assistance, please contact the Department ADA Coordinator via fax at (907) 465-6078; TTY/Alaska Relay 7-1-1 or 1-800-770-8973.

ADF&G does not endorse or recommend any specific company or their products. Product names used in this publication are included for completeness but do not constitute product endorsement.

Contents

Purpose of this Report.....	1
I. RY17–RY21 Management Report	1
Management Area.....	1
Summary of Status, Trend, Management Activities, and History of Caribou in Units 7 and 15 ...	4
Management Direction.....	6
Existing Wildlife Management Plans	6
Goals	6
Codified Objectives	6
Amounts Reasonably Necessary for Subsistence Uses	6
Intensive Management.....	6
Management Objectives.....	6
Management Activities	7
1. Population Status and Trend	7
2. Mortality-Harvest Monitoring and Regulations.....	8
3. Habitat Assessment-Enhancement.....	14
Nonregulatory Management Problems or Needs.....	14
Data Recording and Archiving	14
Agreements	14
Permitting.....	15
Conclusions and Management Recommendations	15
II. Project Review and RY22–RY26 Plan	15
Review of Management Direction	15
Management Direction.....	15
Goals	15
Codified Objectives	16
Amounts Reasonably Necessary for Subsistence Uses	16
Intensive Management.....	16
Management Objectives.....	16
Review of Management Activities.....	16
1. Population Status and Trend	16
2. Mortality-Harvest Monitoring	16
3. Habitat Assessment-Enhancement.....	16
Nonregulatory Management Problems or Needs.....	17
Data Recording and Archiving	17
Agreements	17
Permitting.....	17
References Cited	17

List of Figures

Figure 1. Map of Unit 7, Alaska boundaries, with indicators of controlled use areas (numbered circles) as found in the Alaska Hunting Regulations, administrative subunits, and federal lands, regulatory years 2017–2021.	2
Figure 2. Map of Unit 15, Alaska boundaries, with indicators of controlled use areas (numbered circles) as found in the Alaska Hunting Regulations, administrative subunits, and federal lands, regulatory years 2017–2021.	3

List of Tables

Table 1. Minimum count herd surveys for caribou herds in Units 7 and 15, Kenai Peninsula, Alaska, regulatory years 2017–2021.	7
Table 2. Hunting seasons and bag limits for caribou herds in Units 7 and 15, Kenai Peninsula, Alaska, regulatory years 2017–2021.	8
Table 3. Kenai Mountains caribou herd harvest by sex and harvest effort, Kenai Peninsula, Alaska, regulatory years 2017–2021.	9
Table 4. Killey River caribou herd harvest by sex and harvest effort, Kenai Peninsula, Alaska, regulatory years 2017–2021.	9
Table 5. Fox River caribou herd harvest by sex and harvest effort, Kenai Peninsula, Alaska, regulatory years 2017–2021.	10
Table 6. Hunter success by residency for the Kenai Mountains caribou herd harvest, Kenai Peninsula, Alaska, regulatory years 2017–2021.	11
Table 7. Hunter success by residency for the Killey River caribou herd harvest, Kenai Peninsula, Alaska, regulatory years 2017–2021.	11
Table 8. Hunter success by residency for the Fox River caribou herd harvest, Kenai Peninsula, Alaska, regulatory years 2017–2021.	12
Table 9. Kenai Mountains caribou herd harvest chronology by week, Kenai Peninsula, Alaska, regulatory years 2017–2021.	12
Table 10. Killey River caribou herd harvest chronology by week, Kenai Peninsula, Alaska, regulatory years 2017–2021.	12
Table 11. Fox River caribou herd harvest chronology by week, Kenai Peninsula, Alaska, regulatory years 2017–2021.	13
Table 12. Kenai Mountains caribou herd, number of successful hunters by transport method, Kenai Peninsula, Alaska, regulatory years 2017–2021.	13
Table 13. Killey River caribou herd, number of successful hunters by transport method, Kenai Peninsula, Alaska, regulatory years 2017–2021.	13
Table 14. Fox River caribou herd, number of successful hunters by transport method, Kenai Peninsula, Alaska, regulatory years 2017–2021.	13

Purpose of this Report

This report provides a record of survey and inventory management activities for caribou (*Rangifer tarandus*) in Game Management Units 7 and 15 for the 5 regulatory years 2017–2021 and plans for survey and inventory management activities in the next 5 regulatory years, 2022–2026. A regulatory year (RY) begins 1 July and ends 30 June (e.g., RY14 = 1 July 2014–30 June 2015). This report is produced primarily to provide agency staff with data and analysis to help guide and record agency efforts but is also provided to the public to inform it of wildlife management activities. In 2016 the Alaska Department of Fish and Game's (ADF&G, the department) Division of Wildlife Conservation (DWC) launched this 5-year report to report more efficiently on trends and to describe potential changes in data collection activities over the next 5 years. It replaces the caribou management report of survey and inventory activities that was previously produced every 2 years.

I. RY17–RY21 Management Report

Management Area

Units 7 and 15 combined make up an area of approximately 8,397 mi², which encompasses the Kenai Peninsula. The Kenai Peninsula has 3 major population centers, including Seward, Kenai–Soldotna, and Homer, as well as numerous smaller towns interspersed throughout it. The U.S. Fish and Wildlife Service (USFWS) is the largest land manager on the Kenai Peninsula, with land in all units.

Unit 7 is approximately 3,520 mi² in area and consists of the eastern portion of the Kenai Peninsula bounded by the western edge of the Kenai Mountains, the Russian River, and the Harding Ice Field on the west, and the western edge of the Sargent Ice Field and eastern edge of Spencer Glacier on the east (Fig. 1). The landscape of Unit 7 consists of mountainous terrain interspersed with river and creek drainages, a few large lakes, and ice fields. Riparian areas and hillsides are densely forested until reaching the alpine zone. Approximately 78% of Unit 7 is comprised of federally managed lands: 50% U.S. Forest Service (USFS), Chugach National Forest; 22% National Park Service, Kenai Fjords National Park; 5% USFWS, Kenai National Wildlife Refuge (KNWR); and 1% other federal land.

Unit 15 incorporates the western portion of the Kenai Peninsula and is broken up into 3 subunits: Unit 15A (1,314 mi²), Unit 15B (1,121 mi²), and Unit 15C (2,441 mi²). Each subunit significantly differs in its topography, flora, and ecological history. Unit 15A is the northernmost subunit, separated from Unit 15B by the Kenai River and Skilak Lake. Unit 15C is the southernmost subunit, separated from Unit 15B by the Tustumena Glacier, Tustumena Lake, and the Kasilof River (Fig. 2).

Unit 15A is relatively flat, with many small lakes leading up to the foothills of the Kenai Mountains in the east. The dominant flora is a mixed spruce and hardwood climax community. KNWR is the largest landholder in Unit 15A and actively participates in various cooperative moose management programs, including the ADF&G Moose Research Center near Sterling and the cooperative management of Skilak Loop as a wildlife viewing area. Since a wildfire in 1969

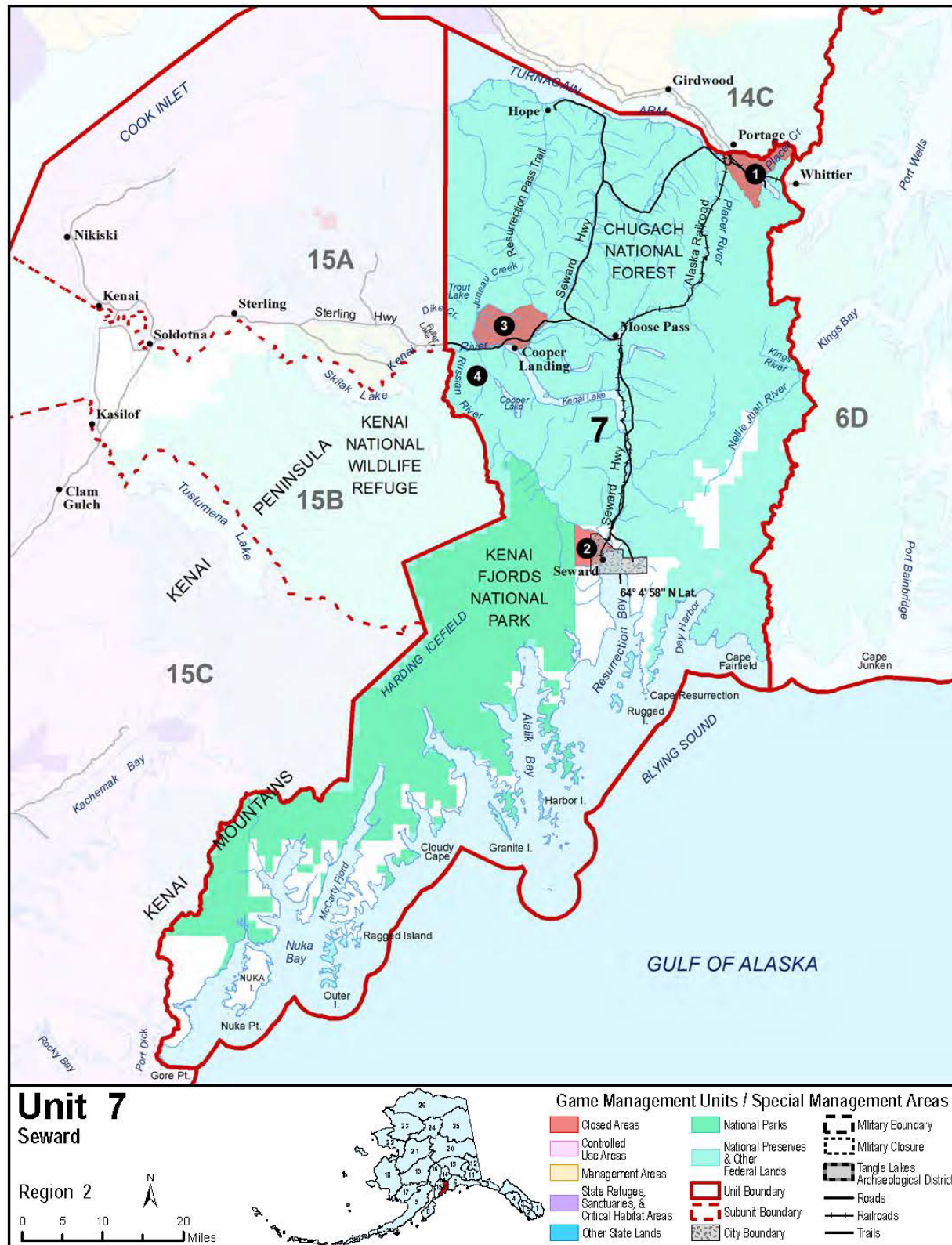


Figure 1. Map of Unit 7, Alaska boundaries, with indicators of controlled use areas (numbered circles) as found in the Alaska Hunting Regulations, administrative subunits, and federal lands, regulatory years 2017–2021.

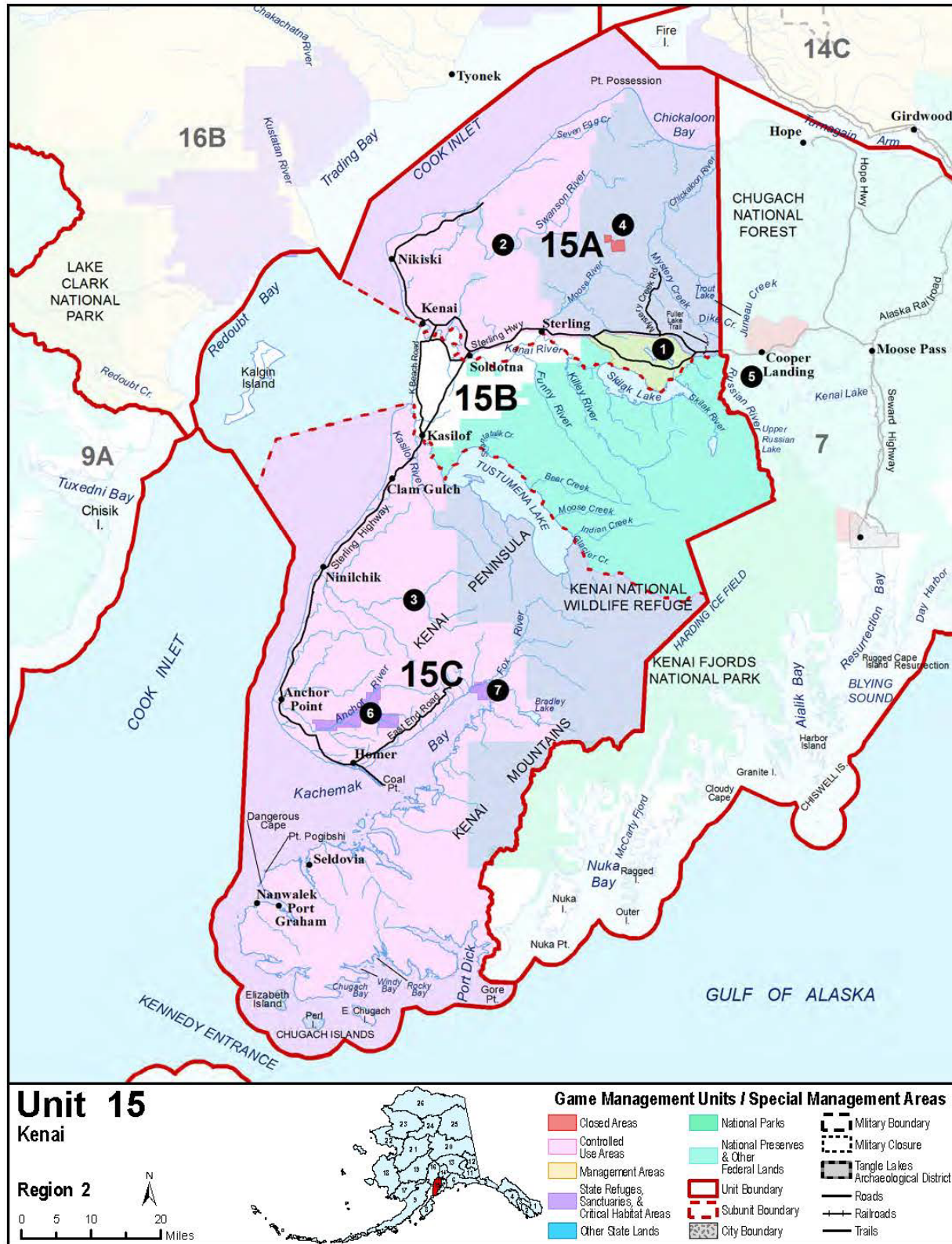


Figure 2. Map of Unit 15, Alaska boundaries, with indicators of controlled use areas (numbered circles) as found in the Alaska Hunting Regulations, administrative subunits, and federal lands, regulatory years 2017–2021.

that burned 85,306 acres, two significant habitat disturbances have occurred: the 2015 Card Street Wildfire, which burned more than 9,000 acres in the southeast corner of Unit 15A, and the 2019 Swan Lake Wildfire, which burned approximately 167,182 acres in the eastern portion of Unit 15A and a small portion of Units 15B and 7.

KNWR is also the largest landholder in Unit 15B. The western portion of Unit 15B is similar to Unit 15A in topography and flora; however, as you go east, Unit 15B becomes more mountainous and transitions into an alpine ecosystem. Forests within Unit 15B succumbed to widespread spruce bark beetle (*Dendroctonus rufipennis*) infestations that began in the 1990s. Unit 15B recently experienced significant habitat turnover in the form of large wildfires. The 2014 Funny River Fire burned approximately 196,610 acres, mostly in Unit 15B. This fire burned in a mosaic pattern and should provide good moose habitat in the near future. Two other fires had previously burned within a portion of the Funny River Fire perimeter; the Shanta Creek Fire in 2009 burned approximately 13,212 acres, and the King County Fire in 2005 burned an additional 10,135 acres. The Funny River Fire completely encompassed the area of the Shanta Creek Fire and a portion of the area of the King County Fire.

Unit 15C is significantly different from both Units 15A and 15B. Refuge lands comprise only a small portion of the unit, in the northeast corner and a section south of Kachemak Bay. The rest of Unit 15C contains a mix of state, private, and municipal land ownership. The portion of Unit 15C north of Kachemak Bay and the Fox River peaks in the Caribou Hills and the Ninilchik Domes and slopes from there down to the lowlands. Very few small lakes are present, but numerous riparian areas drain from the highlands. Dominant vegetation is a mosaic consisting of spruce, willow, bluejoint grass (*Calamagrostis canadensis*; particularly in salvage-logged areas), alder, and some hardwood stands. The northern portion of Unit 15C has seen fairly consistent habitat disturbance over the past 2 decades in the form of wildfires, beetle kill, logging, and human development. The portion of Unit 15C south of Kachemak Bay and the Fox River consists of a very different ecotype compared to the northern portion of Unit 15C in the form of a hypermaritime forest (Nowacki et al. 2001), subalpine, and alpine habitats.

Summary of Status, Trend, Management Activities, and History of Caribou in Units 7 and 15

Historical reports indicate caribou were abundant on the Kenai Peninsula before a series of large fires in the late 1800s, including a massive fire in 1883 (Sherwood 1974). This large-scale disturbance may have destroyed much of the lichen forage used by caribou. It may have influenced their population decline due to long regeneration times for this important winter forage. Additionally, Allen (1901: 148) reported that caribou “are already very scarce on the Kenai Peninsula, and will doubtless soon be exterminated...native hunters kill the Moose and Caribou for their heads, disposing of them at good prices for shipment to San Francisco.” Large-scale fires coupled with unregulated hunting likely caused caribou to be extirpated from the Kenai Peninsula by the early 20th century.

Currently, there are 4 recognized caribou herds on the Kenai Peninsula, which were established through reintroduction efforts. Reintroductions in 1965 and 1966 established the Kenai

Mountains (KMCH) and Kenai Lowlands (KLCH) caribou herds. Additional introductions in 1985 and 1986 established the Killey River (KRCH) and Fox River (FRCH) caribou herds.

KMCH in Unit 7 ranges over 870 mi², primarily in the drainages of Chickaloon River, Big Indian Creek, and Resurrection Creek. The herd grew to more than 200 animals 7 years after the 1965 reintroduction (ADF&G et al. 1994) and numbered more than 400 animals by the mid-1980s (Selinger 2003). The population declined twice after it exceeded 400 animals (ADF&G et al. 1994, Selinger 2003). The reasons for these declines are unknown but do not appear to be related to hunting pressure. In recent years, the herd has declined to less than 200 animals and is centered on the Big Indian Creek drainage. The herd has been hunted since 1972 when a registration hunt was first implemented. From 1972 to 1976, the department issued an unlimited number of registration permits, and the season was closed by emergency order when the harvest exceeded sustainable limits (ADF&G et al. 1994, Spraker 2001). In 1977, a limited drawing permit system was implemented and remains in place to this day. Past fluctuations in population size suggest the carrying capacity for this herd is 200–400 caribou and is restricted presumably due to limited winter range.

KLCH summers north of the Kenai Municipal Airport toward the Swanson River in Unit 15A and the extreme northwestern portion of Unit 15B. The population winters from the headwaters of Moose River to the outlet of Skilak Lake and the area around Browns Lake. The herd's range encompasses about 746 mi², and animals can often be found in and around the communities of Soldotna, Kenai, and Sterling. Population numbers slowly increased to what was previously considered a harvestable number in 1981 (Holdermann 1981). Presently, the herd is estimated at about 100 individuals. Growth in this population has likely been limited by predation. Free-ranging domestic dogs (*Canis lupus familiaris*), coyotes (*Canis latrans*), and wolves (*Canis lupus*) are assumed primary predators. Hunts were held in 1981, 1989, 1990, 1991, and 1992, but no permits have been issued since 1992 (Selinger 2005). KLCH is the most visible herd on the Kenai Peninsula, and animals are frequently observed near the communities of Kenai and Soldotna during the summer. While establishing a hutable population remains an objective for this herd, it has become valued for providing viewing opportunities for residents and visitors.

KRCH inhabits over 373 mi², including the upper drainages of the Funny and Killey rivers and north to the Skilak River in Unit 15B. The herd is estimated to include around 500 individuals. The herd grew steadily to more than 700 animals until 2001 when avalanches killed over a quarter of the population (Selinger 2003). Due to the nature of the landscape, avalanches may be a significant limiting factor for KRCH. The herd has been hunted since 1994 under a limited drawing or registration permit system.

FRCH has the smallest range of all Kenai herds, extending about 75 mi² south of the Tustumena Glacier between upper Fox River and Truuli Creek in Unit 15C. The herd peaked in 1998 (Spraker 2001) and again in 2012 (Herreman 2015) at around 100 caribou. A 2014 survey counted 90 caribou in the herd. A limited number of drawing permits were issued for this herd from 1995 to 2003 when it was thought the population could sustain a limited harvest (Spraker 2001, Selinger 2005). From 2004 to 2010, no hunting permits were issued due to low survey estimates. In 2010, 75 caribou were counted, allowing the department to issue permits again (Selinger 2013), and we have issued 10 drawing permits each year to hunt this herd since 2011.

It is possible that there may be an occasional interchange of animals between KRCH and FRCH; however, to date, this has not been documented due to the limited sample size of collared animals for these herds. No new animals have been collared since 2013. If interchange does occur, it would explain population fluctuations in FRCH. The 2 herds are separated by a narrow, 2-mile-wide glacial flat, and caribou tracks have been observed in that area.

Management Direction

EXISTING WILDLIFE MANAGEMENT PLANS

The 1976 Alaska Wildlife Management Plan (ADF&G 1976) contains 2 sections on Kenai caribou management: the “Kenai Lowlands Caribou Management Plan” and the “Kenai Mountains Caribou Management Plan.” The Kenai Lowlands plan set these goals: first, to provide for the optimum harvest of caribou, and second, to provide an opportunity to view, photograph, and enjoy caribou. No harvest was to occur until the population reached 150 animals. At that time, a limited harvest could occur until the population reached 250 caribou, after which the annual increment could be harvested. The Kenai Mountains plan sets these goals: first, to provide the opportunity to take large-antlered caribou; second, to provide an optimum harvest of caribou; and third, to provide the opportunity to view, photograph, and enjoy caribou. Harvest was to be limited to maintain a population of 300 caribou with a posthunt bull-to-cow sex ratio of 50:100.

Recent management objectives, harvest strategies, and subsequent changes have resulted from public comment, staff recommendations, and Board of Game (BOG, the board) actions and have been reported in the division’s previous species management reports. This report contains the current management plan for caribou in Units 7 and 15.

GOALS

The management goal is to provide optimum sustainable harvest for all caribou herds.

CODIFIED OBJECTIVES

Amounts Reasonably Necessary for Subsistence Uses

The board has not designated caribou as a subsistence resource in Units 7 or 15.

Intensive Management

The board has not designated caribou as an intensive management species in Units 7 or 15.

MANAGEMENT OBJECTIVES

KENAI LOWLANDS CARIBOU HERD

Increase the herd to a minimum of 150 animals. Hunting can be allowed once this objective is reached.

KENAI MOUNTAINS, KILLEY RIVER, AND FOX RIVER CARIBOU HERDS

Maintain viable caribou populations throughout suitable habitat and provide opportunities to hunt these herds when deemed sustainable.

MANAGEMENT ACTIVITIES

1. Population Status and Trend

ACTIVITY 1.1. Conduct minimum count surveys for each herd on a yearly basis.

Data Needs

Minimum population levels, sex ratios, and recruitment information are needed to inform guideline harvest levels and set tag distribution numbers.

Methods

Fixed-wing aerial surveys are conducted annually when appropriate conditions allow, such as adequate snow cover, visibility, and low turbulence.

Results and Discussion

KENAI MOUNTAINS CARIBOU HERD

The herd size at the end of the reporting period was estimated at around 150 animals based on our last minimum count in 2020 (Table 1). Due to budgetary constraints, no flight was conducted in 2021.

Table 1. Minimum count herd surveys for caribou herds in Units 7 and 15, Kenai Peninsula, Alaska, regulatory years 2017–2021.

Regulatory year	Fox River caribou herd	Kenai Lowlands caribou herd	Kenai Mountains caribou herd	Killey River caribou herd
2017	59	91	139	301
2018	29	47	180	413
2019 ^a	67	—	—	431
2020	26	68	143	479
2021	—	65	—	341 ^b

^a Flights were restricted due to the COVID-19 pandemic.

^b Incomplete survey of the herd range.

KENAI LOWLANDS CARIBOU HERD

Based on the 2021 minimum count, the herd size at the end of the reporting period was estimated at around 75 animals (Table 1).

KILLEY RIVER CARIBOU HERD

Based on minimum count surveys, herd size appears to be increasing. The survey in 2021 was incomplete due to weather and was not redone due to budgetary constraints (Table 1).

FOX RIVER CARIBOU HERD

This herd has fluctuated between 26 and 67 animals during RY17–RY21 (Table 1). This fluctuation may be due to animals moving between FRCH and KRCH throughout the winter survey period. Surveys conducted in 2019 support this idea, as only 23 animals were seen during the winter survey period, but 67 animals were observed in August.

Recommendations for Activity 1.1

Continue to conduct aerial surveys on an annual basis.

2. Mortality-Harvest Monitoring and Regulations

ACTIVITY 2.1. Monitor harvest through permit reports.

Data Needs

Harvest must be assessed to avoid overharvest.

Methods

Harvest data are collected through permit reports, and data are entered into ADF&G's Wildlife Information Network (WinfoNet) database. Harvest data is summarized by RY, which begins on 1 July and ends on 30 June (e.g., RY17 = 1 July 2017–30 June 2018).

Season and Bag Limit

Hunting seasons and bag limits are listed in Table 2. In 2020, the KMCH season end date changed from 31 December to 20 September. The most current seasons and bag limits may be found online at: <http://www.adfg.alaska.gov/index.cfm?adfg=wildliferegulations.hunting>.

Table 2. Hunting seasons and bag limits for caribou herds in Units 7 and 15, Kenai Peninsula, Alaska, regulatory years 2017–2021.

Caribou herd	Season	Federal season	Bag limit	Federal bag limit
Fox River	10 Aug–20 Sep	—	1 caribou	—
Kenai Lowlands	No open season	—	1 caribou	—
Kenai Mountains ^a	10 Aug–20 Sep	10 Aug–31 Dec	1 caribou	1 caribou
Killey River ^b	10 Aug–20 Sep	10 Aug–20 Sep	1 caribou	1 caribou

^a The federal season applies only to residents of Hope and Cooper Landing.

^b The federal season first opened in 2020.

Results and Discussion

Harvest by Hunters-Trappers

KENAI MOUNTAINS CARIBOU HERD

The season for resident and nonresident hunters in the portion of Unit 7 north of the Sterling Highway and west of the Seward Highway was changed to 10 August–20 September starting in 2020. The bag limit was 1 caribou by drawing permit (DC001), with 250 permits issued yearly from 1996 to 2013. The average annual harvest was 21 caribou during this period. Starting in 2014, the number of permits available was drastically reduced to 50, and only 25 per year were available during RY17–RY21. State-permitted harvest averaged 2 caribou per year during the reporting period (Table 3). In 2010, the federal subsistence hunt was established, with an average annual harvest of 1 caribou since inception.

Table 3. Kenai Mountains caribou herd harvest by sex and harvest effort, Kenai Peninsula, Alaska, regulatory years 2017–2021.

Regulatory year	State-managed hunt				Federal subsistence hunt				Total harvest
	Permits issued	Number of hunters	Bull harvest	Cow harvest	Permits issued	Number of hunters	Bull harvest	Cow harvest	
2017	25	8	0	1	31	7	3	0	4
2018	25	13	0	1	36	15	1	0	2
2019	25	12	1	2	36	16	2	0	5
2020	25	14	0	3	41	12	0	0	3
2021	25	7	1	1	42	15	0	0	2

KENAI LOWLANDS CARIBOU HERD

The season has been closed since 1993.

KILLEY RIVER CARIBOU HERD

The season for resident and nonresident hunters in the portion of Unit 15B that is south and west of Killey River, in KNWR, was 10 August–20 September. From 2004 to 2013, the bag limit was 1 bull by drawing permit (DC608), with 25 permits issued annually. Since 2014, the number of permits issued has increased significantly, with the highest at 70 permits in 2015. During RY17–RY21, the number of permits issued has remained stable at 50. The average annual harvest has continued to increase from 15 caribou in the previous report period to 19 caribou during the current report period (Table 4).

Table 4. Killey River caribou herd harvest by sex and harvest effort, Kenai Peninsula, Alaska, regulatory years 2017–2021.

Regulatory year	State-managed hunt				Federal subsistence hunt ^a				Total harvest
	Permits issued	Number of hunters	Bull harvest	Cow harvest	Permits issued	Number of hunters	Bull harvest	Cow harvest	
2017	50	37	17	3	–	–	–	–	20
2018	50	24	15	3	–	–	–	–	18
2019	50	19	13	0	–	–	–	–	13
2020	50	36	19	5	2	0	0	0	24
2021	50	36	17	5	2	1	1	0	23

^a The federal subsistence hunt was established in 2020.

FOX RIVER CARIBOU HERD

The season for resident and nonresident hunters in a portion of Unit 15C south of Tustumena Glacier was 10 August–20 September. Drawing permits (DC618) were issued for the 2011 season for the first time since 2003, and the hunt has remained open with a bag limit of 1 caribou per hunter. Ten permits have been issued yearly, with an average annual harvest of 2 caribou during RY17–RY21 (Table 5).

Table 5. Fox River caribou herd harvest by sex and harvest effort, Kenai Peninsula, Alaska, regulatory years 2017–2021.

Regulatory year	Permits issued	Number of hunters	Bull harvest	Cow harvest	Total harvest
2017	10	6	1	2	3
2018	10	6	3	1	4
2019	10	4	0	3	3
2020	10	4	0	1	1
2021	10	4	0	1	1

Hunter Residency and Success

Residency and success rates for the KMCH, KRCH, and FRCH state-managed caribou hunts are shown in Tables 6, 7, and 8, respectively. Resident hunters accounted for the majority of harvest in these populations: 100% for KMCH, 84% for KRCH, and 92% for FRCH (5-year average). The 5-year average success rate for hunters was 18% for KMCH, 66% for KRCH, and 48% for FRCH (Tables 6–8).

Harvest Chronology

Tables 9, 10, and 11 show harvest chronologies for the KMCH, KRCH, and FRCH state caribou hunts, respectively. Since the KMCH season was shortened in 2020, caribou have been harvested throughout the season in all hunt areas.

Transport Methods

Hunter transport methods to where they first started walking for the KMCH, KRCH, and FRCH state caribou hunts are shown in Tables 12, 13, and 14, respectively. Caribou in these populations are off the road system and in areas where methods of access are restricted by land management agencies; therefore, access to the hunting grounds requires long hikes, horseback trips, or access via floatplane on limited lakes. KMCH hunters primarily accessed their hunt area by highway vehicle, KRCH hunters by floatplane or boat, and FRCH hunters by boat.

Other Mortality

KLCH is believed to experience significant mortality from predation on calves and adults by domestic dogs, roadkill, and possible poaching. The other Kenai Peninsula caribou herds are less accessible; therefore, significant mortality by unnatural causes is unlikely.

Table 6. Hunter success by residency for the Kenai Mountains caribou herd harvest, Kenai Peninsula, Alaska, regulatory years 2017–2021.

Regulatory year	Successful					Unsuccessful				Total hunters
	Local resident ^a	Nonlocal resident	Nonresident	Total	Percent success	Local resident ^a	Nonlocal resident	Nonresident	Total	
2017	0	1	0	1	13	0	7	0	7	8
2018	0	1	0	1	8	0	12	0	12	13
2019	0	3	0	3	25	0	8	1	9	12
2020	0	3	0	3	21	0	11	0	11	14
2021	0	2	0	2	22	0	5	2	7	9

^a Local resident refers to residents of Unit 7.**Table 7. Hunter success by residency for the Killey River caribou herd harvest, Kenai Peninsula, Alaska, regulatory years 2017–2021.**

Regulatory year	Successful					Unsuccessful				Total hunters
	Local resident ^a	Nonlocal resident	Nonresident	Total	Percent success	Local resident ^a	Nonlocal resident	Nonresident	Total	
2017	0	18	2	20	54	0	16	1	17	37
2018	0	14	4	18	75	0	5	1	6	24
2019	0	9	4	13	68	0	5	1	6	19
2020	0	23	1	24	71	0	10	0	10	34
2021	0	17	5	22	59	0	13	2	15	37

^a Local resident refers to residents of Unit 15.

Table 8. Hunter success by residency for the Fox River caribou herd harvest, Kenai Peninsula, Alaska, regulatory years 2017–2021.

Regulatory year	Successful					Unsuccessful				Total hunters
	Local resident ^a	Nonlocal resident	Nonresident	Total	Percent success	Local resident ^a	Nonlocal resident	Nonresident	Total	
2017	0	2	1	3	50	0	2	1	3	6
2018	0	4	0	4	67	0	2	0	2	6
2019	0	3	0	3	75	0	0	1	1	4
2020	0	1	0	1	25	0	3	0	3	4
2021	0	1	0	1	25	0	2	1	3	4

^a Local resident refers to residents of Unit 15.

Table 9. Kenai Mountains caribou herd harvest chronology by week, Kenai Peninsula, Alaska, regulatory years 2017–2021.

Regulatory year	Harvest periods week ending												Total harvest
	11 Aug	18 Aug	25 Aug	1 Sep	8 Sep	15 Sep	22 Sep	29 Sep	6 Oct	13 Oct	20 Oct	15 Dec	
2017	0	0	0	1	0	0	0	0	0	0	0	0	1
2018	0	0	0	0	1	0	0	0	0	0	0	0	1
2019	0	1	0	0	0	1	0	0	1	0	0	0	3
2020	0	2	0	0	0	1	–	–	–	–	–	–	3
2021	1	1	0	0	0	0	–	–	–	–	–	–	2

Note: In 2020, the season end date changed from 31 December to 20 September.

Table 10. Killey River caribou herd harvest chronology by week, Kenai Peninsula, Alaska, regulatory years 2017–2021.

Regulatory year	Harvest periods week ending							Total harvest
	11 Aug	18 Aug	25 Aug	1 Sep	8 Sep	15 Sep	22 Sep	
2017	3	3	2	3	4	3	2	20
2018	4	4	1	4	5	0	0	18
2019	3	2	0	0	3	4	1	13
2020	5	4	2	7	2	2	2	24
2021	1	5	7	2	4	3	0	22

Table 11. Fox River caribou herd harvest chronology by week, Kenai Peninsula, Alaska, regulatory years 2017–2021.

Regulatory year	Harvest periods week ending							Total harvest
	11 Aug	18 Aug	25 Aug	1 Sep	8 Sep	15 Sep	22 Sep	
2017	0	1	2	0	0	0	0	3
2018	0	0	1	1	2	0	0	4
2019	0	1	1	0	1	0	0	3
2020	0	1	0	0	0	0	0	1
2021	0	1	0	0	0	0	0	1

Table 12. Kenai Mountains caribou herd, number of successful hunters by transport method, Kenai Peninsula, Alaska, regulatory years 2017–2021.

Regulatory year	Airplane	Horse	ATV and ORV ^a	Highway vehicle	Other and unknown	Foot	Total hunters
2017	0	1	0	4	2	1	8
2018	0	0	0	0	1	0	1
2019	0	1	0	2	0	0	3
2020	0	0	0	1	1	1	3
2021	0	0	0	1	1	0	2

^a ATV refers to all-terrain vehicles, and ORV refers to off-road vehicles, including 3- and 4-wheelers.

Table 13. Killey River caribou herd, number of successful hunters by transport method, Kenai Peninsula, Alaska, regulatory years 2017–2021.

Regulatory year	Airplane	Horse	Boat	ATV and ORV ^a	Highway vehicle	Foot	Total hunters
2017	12	2	5	0	0	1	20
2018	14	1	3	0	0	0	18
2019	9	3	1	0	0	0	13
2020	14	2	8	0	0	0	24
2021	16	1	4	0	0	1	22

^a ATV refers to all-terrain vehicles, and ORV refers to off-road vehicles, including 3- and 4-wheelers.

Table 14. Fox River caribou herd, number of successful hunters by transport method, Kenai Peninsula, Alaska, regulatory years 2017–2021.

Regulatory year	Airplane	Boat	Foot	Total hunters
2017	0	3	0	3
2018	0	4	0	4
2019	0	3	0	3
2020	0	1	0	1
2021	0	1	0	1

Alaska Board of Game Actions and Emergency Orders

There were no BOG actions regarding Kenai Peninsula caribou during RY17–RY21.

Recommendations for Activity 2.1

Continue to monitor harvest through permit reports.

3. Habitat Assessment-Enhancement

ACTIVITY 3.1. Develop and implement habitat assessment and enhancement protocols as time and budget allow.

No habitat assessment or enhancement activities occurred for caribou management in Units 7 and 15 during RY17–RY21.

Data Needs

Information on the current state of caribou habitat in Units 7 and 15 would benefit the management of this species.

Methods

Not applicable.

Results and Discussion

Not applicable.

Recommendations for Activity 3.1

Modifying the current caribou habitat assessment and enhancement work should be considered as time and funding allow. Developing a cost- and time-effective tool to monitor caribou habitat would be beneficial for the management of this species.

NONREGULATORY MANAGEMENT PROBLEMS OR NEEDS

No nonregulatory management problems or needs were identified for RY17–RY21.

Data Recording and Archiving

Permit reports were entered into the WinfoNet database.

Electronic records of the survey results, track files, and animal locations were stored on the Homer Area Office shared drive: (O):DWC/ADF&G-Homer Files/Species Data/.

Agreements

No specific management agreements existed for caribou in Units 7 and 15 during RY17–RY21.

Permitting

No specific permits existed for caribou in Units 7 and 15 during RY17–RY21.

Conclusions and Management Recommendations

Past caribou studies on the Kenai Peninsula have been conducted through cooperative efforts of ADF&G, KNWR, and USFS. Each herd has unique limiting factors impacting its growth. Monitoring and research remained depressed during RY17–RY21 due to other staff priorities.

Kenai Peninsula caribou herds are small in number and have small distinct home ranges compared to other herds in the state (Harper 2013). Habitat is likely the most limiting factor for Kenai Peninsula caribou. As such, these herds lack the potential to support more than minimal hunting opportunities.

In 2010, the Federal Subsistence Board determined customary and traditional use of KMCH by residents of Hope (and Sunrise) and established a federal season. This determination was made even though over 80% of the caribou taken by Hope hunters from 1980 to 2010 were harvested outside the Kenai Peninsula. Furthermore, the long-term use determination for customary and traditional use was given to Hope residents despite caribou being extirpated from the peninsula from 1915 to 1965, with limited hunting starting only in 1972. The Federal Subsistence Board determined that the extirpation of caribou was “beyond the control of the community,” even though historical accounts suggest uncontrolled hunting pressure would likely lead to the extirpation of caribou (Allen 1901). This determination was extended to the community of Cooper Landing in 2014. Similar to Hope, 92% of caribou taken by Cooper Landing hunters from 1980 to 2014 occurred outside of the Kenai Peninsula. In 2022, the determination was further extended to Moose Pass. Residents of Moose Pass harvested 86% of their caribou outside of the Kenai Peninsula from 1980 to 2022. Federal seasons may challenge the successful management of the small caribou herds on the Kenai Peninsula if subsistence harvest increases to the point that it represents a significant portion of the harvest. A split federal–state management system for KMCH and KRCH will continue to challenge managers to maintain these herds at sustainable levels.

II. Project Review and RY22–RY26 Plan

Review of Management Direction

MANAGEMENT DIRECTION

The existing management direction and goals appropriately direct caribou management in Units 7 and 15. The management direction in these units ensures that caribou will persist as part of the natural ecosystem while allowing for some hunting opportunities.

GOALS

The management goal is to provide optimum sustainable harvest for all caribou herds.

CODIFIED OBJECTIVES

Amounts Reasonably Necessary for Subsistence Uses

No change is expected.

Intensive Management

No change is expected.

MANAGEMENT OBJECTIVES

Management objectives will remain unchanged.

REVIEW OF MANAGEMENT ACTIVITIES

1. Population Status and Trend

ACTIVITY 1.1. Conduct minimum count surveys for each herd on a yearly basis.

Data Needs

No change from RY17–RY21.

Methods

No change from RY17–RY21.

2. Mortality-Harvest Monitoring

ACTIVITY 2.1. Monitor harvest through permit reports.

Data Needs

No change from RY17–RY21.

Methods

No change from RY17–RY21.

3. Habitat Assessment-Enhancement

ACTIVITY 3.1. Develop and implement habitat assessment and enhancement protocols as time and budget allow.

Data Needs

No change from RY17–RY21.

Methods

Methods for habitat assessment and enhancement are to be developed.

NONREGULATORY MANAGEMENT PROBLEMS OR NEEDS

Data Recording and Archiving

No change from RY17–RY21.

Agreements

No management agreements are expected for caribou in Units 7 and 15 during RY22–RY26.

Permitting

The department does not expect to seek or issue caribou-specific permits in Units 7 or 15 during RY22–RY26.

References Cited

- Alaska Department of Fish and Game. 1976. Alaska wildlife management plans: A public proposal for the management of Alaska's wildlife: Southcentral Alaska. Draft proposal subsequently approved by the Alaska Board of Game. Division of Game, Federal Aid in Wildlife Restoration Project W-17-R, Juneau.
- Alaska Department of Fish and Game, U.S. Forest Service, and U.S. Fish and Wildlife Service. 1994. Kenai Peninsula caribou management plan. Alaska Department of Fish and Game, Division of Wildlife Conservation, Soldotna.
- Allen, J. A. 1901. Description of a new caribou from Kenai Peninsula, Alaska. Pages 143–148 [In] Bulletin of the American Museum of Natural History 14(10). <http://hdl.handle.net/2246/732> (Accessed 5 August 2016).
- Harper, P., editor. 2013. Caribou Management report of survey-inventory activities, 1 July 2010–30 June 2012. Alaska Department of Fish and Game, Species Management Report ADF&G/DWC/SMR-2010-3, Juneau.
- Herreman, J. K. 2015. Units 7 and 15 caribou. Chapter 1, Pages 1-1 through 1-14 [In] P. Harper and L. A. McCarthy, editors. Caribou management report of survey and inventory activities 1 July 2012–30 June 2014. Alaska Department of Fish and Game, Species Management Report ADF&G/DWC/SMR-2015-4, Juneau.
- Holdermann, D. 1981. Unit 15 caribou survey-inventory progress report. Pages 36–38 [In] R. A. Hinman, editor. Annual report of survey-inventory activities 1 July 1980–30 June 1981: Part II - caribou, moose, and mountain goats. Alaska Department of Fish and Game, Division of Game, Federal Aid in Wildlife Restoration Jobs 3.0, 1.0, and 12.0, Juneau.

- Nowacki, G., P. Spencer, T. Brock, M. Fleming, and T. Jorgenson. 2001. Ecoregions of Alaska and neighboring territory. U.S. Geological Survey, Reston, VA.
- Selinger, J. 2003. Units 7 and 15 caribou management report. Pages 1–33 [*In*] C. Healy, editor. Caribou management report of survey-inventory activities 1 July 2000–30 June 2002. Alaska Department of Fish and Game, Division of Wildlife Conservation, Federal Aid in Wildlife Restoration Project 3.0, Juneau.
- Selinger, J. 2005. Units 7 and 15 caribou management report. Pages 1–19 [*In*] C. Brown, editor. Caribou management report of survey-inventory activities 1 July 2002–30 June 2004. Alaska Department of Fish and Game, Division of Wildlife Conservation, Federal Aid in Wildlife Restoration Project 3.0, Juneau.
- Selinger, J. 2013. Units 7 and 15 caribou management report. Pages 1–12 [*In*] P. Harper, editor. Caribou management report of survey-inventory activities 1 July 2010–30 June 2012. Alaska Department of Fish and Game, Species Management Report ADF&G/DWC/SMR-2013-3, Juneau.
- Sherwood, M. 1974. The Cook Inlet collection: Two hundred years of selected Alaskan history. Alaska Northwest Publishing Company, Anchorage.
- Spraker, T. H. 2001. Units 7 and 15 caribou management report. Pages 1–22 [*In*] C. Healy, editor. Caribou management report of survey-inventory activities 1 July 1998–30 June 2000. Alaska Department of Fish and Game, Division of Wildlife Conservation, Federal Aid in Wildlife Restoration Project 3.0, Juneau.

