

SOUTH DAKOTA MOUNTAIN GOAT ACTION PLAN 2024–2028



**SOUTH DAKOTA DEPARTMENT OF GAME, FISH AND PARKS
PIERRE, SOUTH DAKOTA**

WILDLIFE DIVISION REPORT 2024–02AP

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This document is for general, strategic guidance for the South Dakota Department of Game, Fish and Parks (SDGFP) and serves to identify what we strive to accomplish related to mountain goat management. By itself this document is of little value; the value is in its implementation. This process will emphasize working cooperatively with interested publics in both the planning process and the regular program activities related to mountain goat management. This plan will be used by Department staff and Commission on an annual basis and will be formally evaluated at least every five years. Plan updates and changes, however, may occur more frequently as needed.

ACKNOWLEDGEMENTS

This plan is a product of substantial discussion and input from many wildlife professionals and the South Dakota public sector. In addition, those comments and suggestions received from private landowners, hunters, and those who recognize the value of mountain goats and their associated habitats were also considered.

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All text and data contained within this document are subject to revision for corrections, updates, and data analyses.

Cover photo was provided by Chad Lehman (SDGFP).

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EXECUTIVE SUMMARY

Peter Norbeck was instrumental in introducing the mountain goat into the Black Hills in the 1920s. Throughout the early 1900s, mountain goats (*Oreamnos americanus*) were introduced outside of their endemic range into new areas of Alaska, Washington, Oregon, Idaho, Montana, Wyoming, South Dakota, Colorado, Utah, and Nevada. The mountain goat is an impressive mountain ungulate in its ability to negotiate steep terrain and cliffs and it provides hunting and viewing opportunities across the highest elevations of the Black Hills.

This management plan provides important historical background and relevant biological information for the sustainable management of mountain goats. Current mountain goat survey methodology and relevant biological literature are presented, along with a thorough discussion of objectives and strategies to guide management of this important resource into the future. This plan is intended to guide managers and biologists over the next five years, but should be considered a working document that will be amended as new biological and social data provide opportunities to improve management of mountain goat resources in South Dakota.

The management of mountain goats and their habitats can be challenging for wildlife and habitat managers. One challenge facing managers is maintaining open landscapes around granite outcroppings in a heavily forested ponderosa pine (*Pinus ponderosa*) ecosystem. Using tools such as prescribed burning and timber management in these landscapes can enhance mountain goat habitat. Additionally, the mountain pine beetle (*Dendroctonus ponderosae* Hopkins), a native insect, provides a natural disturbance creating habitat. Disease initiated by *Mycoplasma ovipneumoniae* can occur in bighorn sheep (*Ovis canadensis*), domestic sheep (*Ovis aries*) and goats (*Capra hircus*), and mountain goats in the Black Hills leading to possible deaths from pneumonia for both bighorn sheep and mountain goats. This pathogen has been linked to limiting recruitment of mountain goats in other areas of the west and is a concern for managers.

For the management of mountain goats the following objectives have been identified: 1) maintain, manage, and protect existing mountain goat habitat in the Black Hills; 2) determine status of mountain goat populations; 3) bi-annually review and set mountain goat management objectives; use harvest strategies to manage the population with the available resource; 4) management and monitoring of disease pathogens in mountain goat herds in the Black Hills; 5) continue to use science-based research, habitat inventories, and surveys to answer questions related to mountain goat ecology and public attitudes towards mountain goat management; and 6) inform and educate the public on mountain goat ecology, management, research, and provide viewing opportunities.

The “*South Dakota Mountain Goat Action 2024–2028*” will serve as the guiding document for decision making and implementation of actions to ensure mountain goat populations and their habitats are managed appropriately. South Dakota Department of Game, Fish and Parks will work closely with Black Hills National Forest, National Park Service, and sportsmen and women to overcome the challenges and take advantage of opportunities regarding the future management of mountain goats in South Dakota.

INTRODUCTION

The mountain goat (*Oreamnos americanus*) is not native to South Dakota and was first introduced in 1924. Peter Norbeck was instrumental in introducing the mountain goat into the Black Hills as Custer State Park (CSP) obtained six animals from Alberta, Canada and placed them in an enclosure, or zoo, at CSP (Table 1). The mountain goats did not stay in captivity long, as two of the goats, an adult female and a yearling male, escaped the first night. By 1929, all remaining goats had escaped. These goats moved approximately 10 miles northwest onto the Black Elk Peak range (formerly known as Harney Peak). The introduced goats did very well in the granite outcroppings around Black Elk Peak and by the early 1950s there were an estimated 300 to 400 mountain goats. The population remained stable through the 1950s and 60s. From 1954 to 1968, 40 mountain goats were transplanted to Spearfish Canyon in the Black Hills and to the states of Wyoming and Colorado. The population declined through the 1970s likely due to overharvest and transplants. Hunter observations and department surveys conducted in 1981–1982 indicated a substantial decrease in the mountain goat population and by 1983 the mountain goat population was reported to be approximately 80 animals (Benzon and Rice 1987). By the 1990s the mountain goat population increased to an estimated 150 to 170 animals. In the early 2000s the mountain goat population started to decline again in the Black Hills and therefore South Dakota Game, Fish and Parks (SDGFP) captured and translocated 19 mountain goats from Colorado in 2006 and 21 mountain goats from Utah in 2013 (Table 1).

Table 1. History of mountain goat translocations in South Dakota, 1924–2024.

| Year | Number Translocated | Capture Location | Release Location |
|-----------|---------------------|---------------------------|--|
| 1924 | 6 | Alberta, Canada | Custer State Park, Black Hills, South Dakota |
| 1954 | 6 | Black Hills, South Dakota | Spearfish Canyon, Black Hills, South Dakota |
| 1960 | 8 | Black Hills, South Dakota | Wyoming |
| 1961-1968 | 26 | Black Hills, South Dakota | Colorado |
| 2006 | 19 | Colorado | Black Hills, South Dakota |
| 2013 | 21 | Utah | Black Hills, South Dakota |
| Totals | 86 | | |

SURVEYS AND MONITORING

Population estimates prior to 2007 surveys indicate the Black Hills population has fluctuated greatly from 80–400 animals from the 1940s through the 1980s (Richardson 1971, Benzon and Rice 1987). Mountain goat abundance estimates have been generated through aerial surveys using helicopters and radio-collared mountain goats since 2007 (Table 2). If the radiomarked sample size of mountain goats get so small as to preclude estimating population size using mark-resight, managers will utilize minimum counts and occupancy modeling data to set seasons.

Additionally, mountain goat age and gender ratio estimates have been collected by department staff and volunteers from the ground using binoculars to count mountain goats in the core area of their range in 2014–2018 and 2024. Ground surveys were conducted in late April 2014–2018 and late June 2024. In 2022–2024, ratio counts were conducted via helicopter. Mature billy:mature nanny ratios have varied from 0.19–0.69, and the kid:mature nanny ratios have varied from 0.23–0.93 (Table 3).

Occupancy estimates have also been generated with data collected during helicopter aerial surveys from 2013–2024 (Table 4). We provide estimates across 2 time periods for both detection probability (ψ) and also for occupancy lambda, or growth in occupancy (λ). Occupancy lambda of mountain goats was positive from 2013–2018, and occupancy estimates then declined from 2018–2024.

MOUNTAIN GOAT HUNTING- HISTORICAL HARVEST AND LICENSES

Mountain goats have been hunted in the Black Hills with season dates ranging from September 1–December 31 in recent years (Figure 1). The first season for mountain goats was held in 1967 and 25 licenses were offered (Table 5). Harvest and season closures have varied through time, and in recent years there have been 2 licenses offered each year to hunters. In 2016, the mark-resight mountain goat population estimate was 133, and a harvest of 2 males was 1.5% of the population, a conservative harvest based on recommendations for harvest in native populations (Côté and Festa-Bianchet 2003, Rice and Gay 2010). Surveys in 2022 indicated a minimum count of 42 animals and therefore the hunting season was closed in 2023. Management of mountain goats is closely monitored and population growth is closely tied to nanny survival and reproduction. If females are removed by harvest at a higher rate the response from the population can be negative growth due to fewer kids being recruited back into the population (Figure 2). It is important that hunters only harvest males from this population to ensure a sustainable population of mountain goats for everyone to enjoy.

HARVEST STRATEGY

For the management of mountain goats, it is recommended that harvest will not exceed 4% of the minimum number counted within the mountain goat core area as determined during bi-annual surveys. When the minimum number counted reaches less than 50 individuals the

season will be closed. Other demographic data can be used in assessing season closures and the season can be closed with minimum counts of greater than 50.

Table 2. Survey data for estimating abundance for mountain goats in the Black Hills, South Dakota, 1948–2022.

| Year | Minimum Count | Population Estimate | 95% Confidence Interval | Method ^a |
|-----------|---------------|---------------------|-------------------------|------------------------------------|
| 1948 | - | 64 | NA | Ground count |
| 1951 | - | 337 | NA | Ground count |
| 1983 | 41 | - | NA | Helicopter |
| 1984 | 12 | - | NA | Helicopter |
| 1985 | 34 | - | NA | Helicopter |
| 1986 | 26 | 115 | NA | Helicopter |
| 1987 | 31 | 125 | NA | Helicopter |
| 1988-1990 | - | - | - | - |
| 1991 | - | 150-170 | NA | Ground count |
| 1992-1993 | - | - | - | - |
| 1994 | 54 | 157-234 | NA | Helicopter |
| 1995 | 68 | 213 | NA | Helicopter |
| 1996 | 43 | 197 | NA | Helicopter |
| 1997 | 38 | 170-190 | NA | Helicopter |
| 1998 | 18 | 140-180 | NA | Helicopter |
| 1999 | 32 | 140-180 | NA | Helicopter |
| 2000 | 47 | 140-180 | NA | Helicopter |
| 2001 | 15 | 140-180 | NA | Helicopter |
| 2002 | 25 | 160 | NA | Helicopter |
| 2003 | 26 | 150 | NA | Helicopter |
| 2004 | 15 | 125 | NA | Helicopter |
| 2005 | 21 | 90 | NA | Helicopter |
| 2006 | 20 | 70 | NA | Helicopter |
| 2007 | 15 | 62 | 53-71 | Helicopter-Sightability |
| 2008 | 23 | 71 | 60-81 | Helicopter-Sightability |
| 2009 | 20 | 56 | 48-65 | Helicopter-Sightability |
| 2010 | 23 | 76 | 64-88 | Helicopter-Sightability |
| 2011 | 18 | 55 | 46-63 | Helicopter-Sightability |
| 2012 | 34 | 104 | 89-120 | Helicopter-Sightability |
| 2013 | 37 | 111 | 95-127 | Helicopter-Sightability |
| 2014 | 99 | 121 | 99-207 | Helicopter-Log-normal Mark-Resight |
| 2016 | 106 | 133 | 106-236 | Helicopter-Log-normal Mark-Resight |
| 2018 | 95 | 135 | 95-373 | Helicopter-Log-normal Mark-Resight |
| 2022 | 42 | NA | NA | Helicopter-Minimum Count |
| 2024 | 29 | NA | NA | Helicopter-Minimum Count |

^aGround counts were used from 1948–1951. A helicopter survey was used from 1983–2006 using a mix of mark-resight and detection probability adjustments. Using helicopters, a sightability model was used to estimate population size using radio-collars and the mean detection rate from several flights conducted from 2007–2013. Using helicopters from 2014–2018, a Poisson log-normal mark-resight estimate was used to estimate population size from radio-marked mountain goats.

Table 3. Ratio data for mountain goats in the Black Hills, South Dakota, 2014–2024.

| Year | Mature Billy:Mature Nanny Ratio | Kid:Mature Nanny Ratio | Method |
|------|---------------------------------|------------------------|---------------|
| 2014 | 0.19 | 0.23 | Ground Counts |
| 2015 | 0.44 | 0.93 | Ground Counts |
| 2016 | 0.39 | 0.31 | Ground Counts |
| 2018 | 0.38 | 0.25 | Ground Counts |
| 2022 | 0.48 | 0.33 | Helicopter |
| 2024 | 0.69 | 0.39 | Helicopter |

Table 4. Occupancy estimates using aerial surveys for mountain goats in the Black Hills, South Dakota, 2013–2024.

| Time Period | PSI (Detection Probability) (95% CI) | Lambda (Occupancy Estimate) (95% CI) |
|-------------|--------------------------------------|--------------------------------------|
| 2013-2014 | 0.39 (0.29-0.49) | 1.30 (0.93-1.68) |
| 2014-2016 | 0.45 (0.32-0.57) | 1.15 (1.01-1.29) |
| 2016-2018 | 0.49 (0.36-0.61) | 1.18 (0.81-1.54) |
| 2018-2022 | 0.30 (0.18-0.43) | 0.55 (0.35-0.75) |
| 2022-2024 | 0.31 (0.13-0.49) | 0.77 (0.39-1.15) |

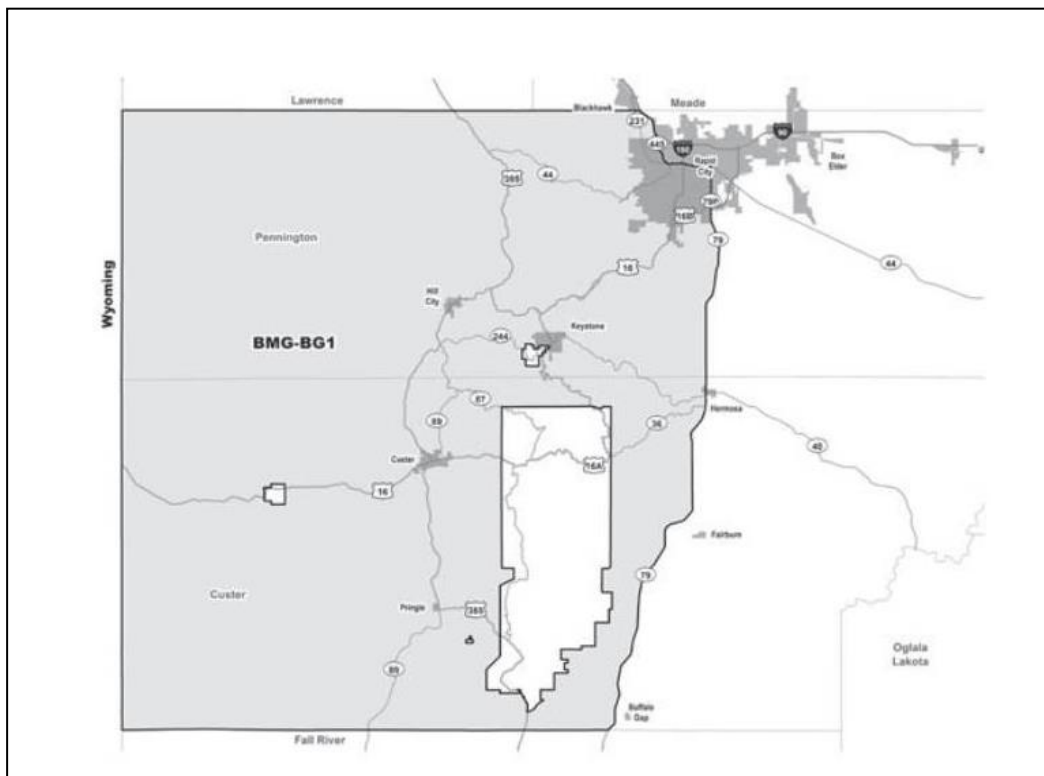


Figure 1. Mountain Goat Hunting Unit Map for South Dakota in 2022.

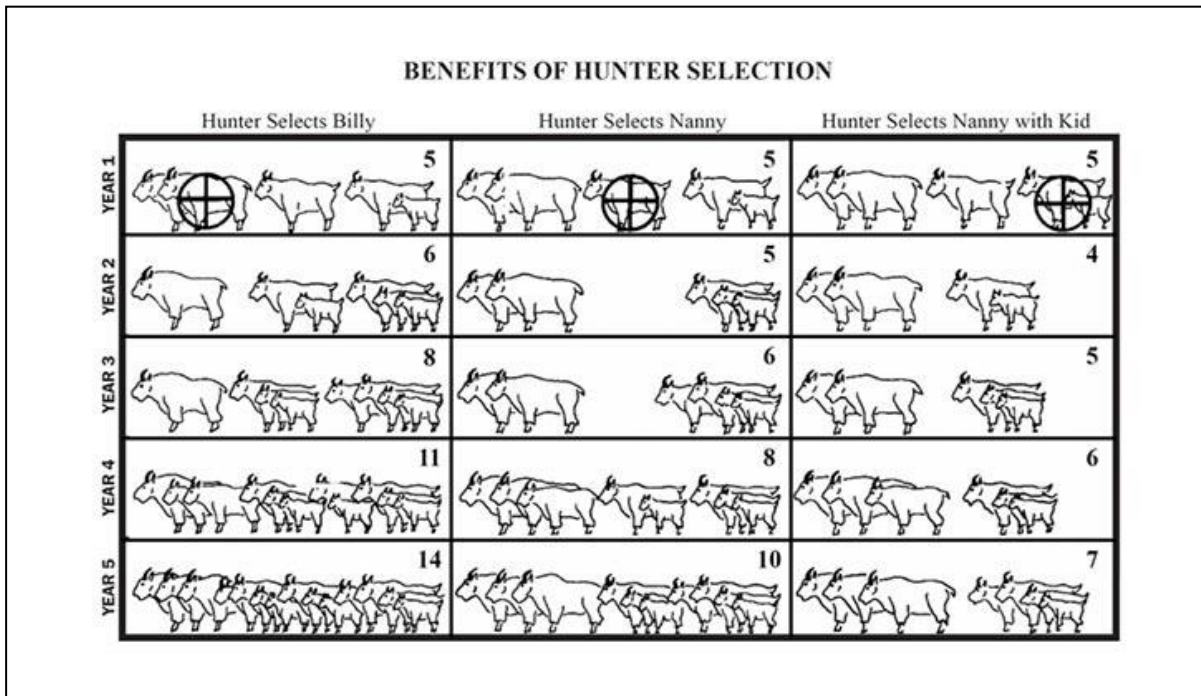


Figure 2. Five-year trend which exemplifies the benefits of harvesting males and passing up females; if hunters take the time to select males instead of females, more goats will be available for future harvest and viewing by the public. Figure credit Alaska Department of Fish and Game.

Table 5. Historical harvest of mountain goats in the Black Hills, South Dakota, 1967–2024.

| Year | Licenses Issued | Total Harvest | Male | Female | Unknown |
|-----------|-----------------|---------------|-----------|--------|---------|
| 1967 | 25 | 24 | 13 | 11 | 0 |
| 1968 | 25 | 21 | 13 | 8 | 0 |
| 1969 | 25 | 24 | 19 | 5 | 0 |
| 1970 | 25 | 24 | 14 | 10 | 0 |
| 1971 | 15 | 12 | 5 | 7 | 0 |
| 1972 | | | No Season | | |
| 1973 | 15 | 12 | 3 | 9 | 0 |
| 1974-1975 | | | No Season | | |
| 1976 | 15 | 12 | 4 | 8 | 0 |
| 1977 | 10 | 9 | 1 | 1 | 7 |
| 1978 | 10 | 9 | 4 | 5 | 0 |
| 1979 | 10 | 10 | 6 | 4 | 0 |
| 1980 | 10 | 10 | 6 | 4 | 0 |
| 1981 | 10 | 10 | 8 | 2 | 0 |
| 1982-1984 | | | No Season | | |
| 1985 | 4 | 4 | 3 | 1 | 0 |
| 1986 | 3 | 3 | 2 | 1 | 0 |
| 1987 | 5 | 5 | 5 | 0 | 0 |
| 1988 | 5 | 5 | 4 | 1 | 0 |
| 1989 | 5 | 5 | 1 | 4 | 0 |
| 1990 | 4 | 4 | 3 | 1 | 0 |
| 1991 | 4 | 4 | 4 | 0 | 0 |
| 1992 | 4 | 4 | 2 | 2 | 0 |
| 1993 | 4 | 4 | 3 | 1 | 0 |
| 1994 | 4 | 4 | 3 | 1 | 0 |
| 1995 | 4 | 4 | 3 | 1 | 0 |
| 1996 | 5 | 5 | 1 | 4 | 0 |
| 1997 | 4 | 4 | 3 | 1 | 0 |
| 1998 | 4 | 4 | 4 | 0 | 0 |
| 1999 | 4 | 4 | 4 | 0 | 0 |
| 2000 | 4 | 3 | 3 | 0 | 0 |
| 2001 | 4 | 4 | 2 | 2 | 0 |
| 2002 | 3 | 3 | 2 | 1 | 0 |
| 2003 | 3 | 3 | 1 | 2 | 0 |
| 2004 | 3 | 3 | 1 | 2 | 0 |
| 2005 | 2 | 2 | 0 | 2 | 0 |
| 2006 | 2 | 1 | 0 | 1 | 0 |
| 2007-2014 | | | No Season | | |
| 2015 | 2 | 2 | 1 | 1 | 0 |
| 2016 | 2 | 2 | 2 | 0 | 0 |
| 2017 | 2 | 2 | 2 | 0 | 0 |
| 2018 | 2 | 2 | 1 | 1 | 0 |
| 2019 | 2 | 2 | 1 | 1 | 0 |
| 2020 | 2 | 2 | 2 | 0 | 0 |
| 2021 | 2 | 2 | 1 | 1 | 0 |
| 2022 | 2 | 2 | 2 | 0 | 0 |
| 2023-2024 | | | No Season | | |
| Total | 295 | 275 | 162 | 106 | 7 |

Disease

A potentially concerning threat is respiratory disease initiated by *Mycoplasma ovipneumoniae* which can occur in bighorn sheep, domestics, and mountain goats in the Black Hills leading to possible deaths from pneumonia for both bighorn sheep and mountain goats. Pneumonia deaths related to *Mycoplasma ovipneumoniae* and other forms of bacteria have been the primary mortality factor limiting bighorn sheep herds in the Black Hills (Smith et al. 2014, Garwood et al. 2020) and throughout the west (Besser et al. 2013, Cassirer et al. 2018). This pathogen has been linked to limiting recruitment of kids in a population of mountain goats in Nevada (P. Wolff, Nevada Department of Wildlife, personal communication). A mountain goat tested positive for a new strain of *Mycoplasma ovipneumoniae* in the Black Hills in 2016 and we will continue to monitor the influence such pathogens may have on mountain goats in the Black Hills. Unfortunately, mountain goats may be a reservoir for transmission of a new strain of *Mycoplasma ovipneumoniae* to populations of bighorn sheep, and vice-versa, and is a concern for wildlife managers. Continued monitoring and research of the disease, and its various strains in the Black Hills, may provide insights into potential for disease transfer and implications for population growth for both species.

GOALS, OBJECTIVES & STRATEGIES

Guiding Principles

The following statements have guided the development of the mountain goat management plan goals and objectives and reflect the collective values of the SDGFP in relation to management of mountain goats in South Dakota:

- that wildlife, including mountain goats, contributes significantly to the quality of life in South Dakota and therefore must be sustained for future generations.
- that recreational hunting is a legitimate use of mountain goats and must be encouraged and preserved.
- that the collaboration among various agencies, including the NPS, USFS and the State, is critical for the future of mountain goats and their habitats in the Black Hills, and is deserving of recognition and respect.
- that reasonable regulations are necessary for equitable distribution of the benefits of wildlife, including mountain goats, and to promote ethical and safe behavior.
- that the future of wildlife, including mountain goats, depends on a public that appreciates, understands, and supports wildlife and in the public's right to participate in decisions related to wildlife issues.

GOALS, OBJECTIVES & STRATEGIES

The goal for mountain goat management in South Dakota is to maximize user opportunity while maintaining populations consistent with ecological, social, aesthetic, and economic values of the people of South Dakota and our visitors.

Objectives and Strategies

Objective 1. Maintain, manage, and protect existing mountain goat habitat in the Black Hills.

Strategy A: Maintain existing partnerships with the USFS, NPS, and other state, local, and private conservation partners to support programs and practices encouraging proper mountain goat habitat management on public and private lands.

Strategy B: Avoid disturbance during critically sensitive parturition and nursery periods. Parturition for nannies can occur from May 1–June 15. Nursery groups can be raising kids in sensitive areas during May 1–August 31.

Objective 2. Determine status of mountain goat populations.

Strategy A: Annually implement surveys including ground and hunter harvest.

Strategy B: Bi-annually conduct helicopter aerial surveys to obtain minimum counts and generate occupancy estimates.

Strategy C: Supplement survey data with research findings when available.

Objective 3. Bi-annually review and set mountain goat management objectives; use harvest strategies to manage the population with the available resource.

Strategy A: Bi-annually review mountain goat harvest strategies, license allocation, hunting unit boundaries, and develop 2-year hunting recommendations based on available biological data, public input, and staff recommendations.

Strategy B: Harvest will not exceed 4% of the minimum number counted within the mountain goat core area as determined during bi-annual surveys. When the minimum number counted reaches less than 50 individuals the season will be closed. Other demographic data can be used in assessing season closures and the season can be closed with minimum counts of greater than 50.

Objective 4. Manage and monitor disease pathogens in mountain goat herds in the Black Hills.

Strategy A: Continue to inventory and document domestic sheep and goats in areas adjacent to mountain goat herds.

Strategy B: Work with conservation organizations to develop cooperative programs to discourage domestic sheep and goat ownership in areas adjacent to mountain goat herds.

Strategy C: Manage and monitor mountain goat disease events and attempt to mitigate losses of goats through disease mitigation management when feasible; implement testing and removal of mountain goats that are identified as shedders of *Mycoplasma ovipneumoniae* in populations that are experiencing pneumonia die-offs in an attempt to recover these populations at a faster rate.

Objective 5. Continue to use science-based research, habitat inventories, and surveys to answer questions related to mountain goat ecology and public attitudes towards mountain goat management.

Strategy A: Annually evaluate and prioritize research/survey needs. Develop research/survey proposals and seek funding opportunities.

Strategy B: Use research/survey findings to guide mountain goat management where available and feasible.

Objective 6. Inform and educate the public on mountain goat ecology, management, research, and provide viewing opportunities.

Strategy A: Provide an electronic copy of the “South Dakota Mountain Goat Action Plan 2024–2028” on the department’s website. Printed copies will be available upon request by March 2025.

Strategy B: Use all available media to educate and inform the public regarding mountain goat status, ecology, and harvest.

Strategy C: Brief mountain goat hunters annually in accurately determining gender of mountain goats and encourage harvest of males as harvest of females contributes to additive mortality.

Strategy D: Promote viewability of mountain goats for the enjoyment of the public. Opportunities exist where tourism viewsheds such as Mount Rushmore and the Needles Eye provide the public a unique setting to observe their behavior as a quality experience.

Table 6. Implementation schedule and primary responsibility.

| Goals, Objectives & Strategies | 2024 | 2025 | 2026 | 2027 | 2028 | Primary Responsibility |
|---|-------------|-------------|-------------|-------------|-------------|--|
| GOAL: The goal for mountain goat management in South Dakota is to maximize user opportunity while maintaining populations consistent with ecological, social, aesthetic, and economic values of the people of South Dakota and our visitors. | | | | | | |
| OBJECTIVE 1: Maintain, manage, and protect existing mountain goat habitat in the Black Hills. | | | | | | |
| Strategies | | | | | | |
| Strategy A: Maintain existing partnerships with the US Forest Service, NPS, and other state, local, and private conservation partners to support programs and practices encouraging proper mountain goat habitat management on public and private lands. | ✓ | ✓ | ✓ | ✓ | ✓ | Senior Biologist Regional Wildlife Manager Administration Habitat Program Administrator USFS–SDGFP liaison |
| Strategy B: Avoid disturbance during critically sensitive parturition and nursery periods. Parturition for nannies can occur from May 1–June 15. Nursery groups can be raising kids in sensitive areas during May 1–August 31. | ✓ | ✓ | ✓ | ✓ | ✓ | Administration Reg. Terrestrial Res. Supervisor Habitat Program Administrator USFS–SDGFP liaison |
| OBJECTIVE 2: Determine status of mountain goat populations. | | | | | | |
| Strategies | | | | | | |
| Strategy A: Annually implement surveys including ground and hunter harvest. | | | | | | |
| Strategy B: Bi-annually conduct helicopter aerial surveys to obtain minimum counts and generate occupancy estimates. | ✓ | | ✓ | | ✓ | Regional Wildlife Manager Senior Biologist Harvest Survey Coordinator |
| Strategy C: Supplement survey data with research findings when available. | ✓ | ✓ | ✓ | ✓ | ✓ | Senior Biologist Regional Wildlife Manager |
| OBJECTIVE 3: Bi-annually review and set mountain goat management objectives; use harvest strategies to manage the population with the available resource. | | | | | | |
| Strategies | | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| Strategy A: Bi-annually review mountain goat harvest strategies, license allocation, hunting unit boundaries, and develop 2-year hunting recommendations based on available biological data, public input, and staff recommendations. | | ✓ | | ✓ | | Senior Biologist Reg. Terrestrial Res. Supervisor Regional Wildlife Manager Administration |
| Strategy B: Harvest will not exceed 4% of the minimum number counted within the mountain goat core area as determined during bi-annual surveys. When the minimum number counted reaches less than 50 individuals the season will be closed. Other demographic data can be used in assessing season closures and the season can be closed with minimum counts of greater than 50. | ✓ | ✓ | ✓ | ✓ | ✓ | Senior Biologist Reg. Terrestrial Res. Supervisor Regional Wildlife Manager Administration |
| OBJECTIVE 4: Management and monitoring of disease pathogens in mountain goat herds in the Black Hills. | | | | | | |
| Strategies | | | | | | |
| Strategy A: Continue to inventory and document domestic sheep and goats in areas adjacent to mountain goat herds. | ✓ | ✓ | ✓ | ✓ | ✓ | Regional Wildlife Manager Reg. Terrestrial Res. Supervisor |
| Strategy B. Work with conservation organizations to develop cooperative programs to discourage domestic sheep and goat ownership in areas adjacent to mountain goat herds. | ✓ | ✓ | ✓ | ✓ | ✓ | Regional Wildlife Manager Reg. Terrestrial Res. Supervisor |
| Strategy C. Manage and monitor mountain goat disease events and attempt to mitigate losses of goats through disease mitigation management when feasible; implement testing and removal of mountain goats that are identified as shedders of <i>Mycoplasma ovipneumoniae</i> in populations that are experiencing pneumonia die-offs in an attempt to recover these populations at a faster rate. | ✓ | ✓ | ✓ | ✓ | ✓ | Senior Biologist Regional Wildlife Manager Reg. Terrestrial Res. Supervisor |
| OBJECTIVE 5: Continue to use science-based research, habitat inventories, and surveys to answer questions related to mountain goat ecology and public attitudes towards mountain goat management. | | | | | | |
| Strategies | | | | | | |
| Strategy A: Annually evaluate and prioritize research/survey needs. Develop research/survey proposals and seek funding opportunities. | ✓ | ✓ | ✓ | ✓ | ✓ | Reg. Terrestrial Res. Supervisor Regional Wildlife Manager Senior Biologist |

| | | | | | | |
|---|---|---|---|---|---|---|
| Strategy B: Use research/survey findings to guide mountain goat management where available and feasible. | ✓ | ✓ | ✓ | ✓ | ✓ | Reg. Terrestrial Res. Supervisor Regional Wildlife Manager Senior Biologist |
| OBJECTIVE 6: Inform and educate the public on mountain goat ecology, management, research, and provide viewing opportunities. | | | | | | |
| Strategies | | | | | | |
| Strategy A: Provide an electronic copy of the “South Dakota Mountain Goat Action Plan 2024–2028” on the department’s website. Printed copies will be available upon request by March 2025. | ✓ | | | | | Communications Staff |
| Strategy B: Use all available media to educate and inform the public regarding mountain goat status, ecology, and harvest. | ✓ | ✓ | ✓ | ✓ | ✓ | Communication Staff |
| Strategy C: Brief mountain goat hunters annually in accurately determining gender of mountain goats and encourage harvest of males as harvest of females contributes to additive mortality. | ✓ | ✓ | ✓ | ✓ | ✓ | Regional Wildlife Manager Regional Staff |
| Strategy D: Promote viewability of mountain goats for the enjoyment of the public. Opportunities exist where tourism viewsheds such as Mount Rushmore and the Needles Eye provide the public a unique setting to observe their behavior as a quality experience. | ✓ | ✓ | ✓ | ✓ | ✓ | Regional Wildlife Manager Regional Staff |