Alaska
Small Game Summary 2025

Cameron J. Carroll and Timothy J. Spivey

Species considered small game in Alaska are defined by the Alaska Department of Fish and Game (ADF&G), for regulatory purposes as grouse, ptarmigan, and hare. Alaska has 7 species of grouse and ptarmigan (Tetraonidae) including ruffed (*Bonasa umbellus*), sharp-tailed (*Tympanuchus phasianellus*), sooty (*Dendragapus fuliginosus*), and spruce (*Falcipennis canadensis*) grouse; and rock (*Lagopus muta*), white-tailed (*L. leucurus*), and willow (*L. lagopus*) ptarmigan. In addition, Alaska has 2 species of hare (Leporidae) including Alaska (*Lepus othus*) and snowshoe (*L. americanus*) hare. All 7 species of grouse and ptarmigan and snowshoe hare can be legally harvested in Alaska with liberal seasons and bag limits for all game management units (Unit). Alaska hare, which have a distribution limited to western coastal areas, can be harvested in most Units with liberal season dates but more conservative bag limits due to reduced numbers relative to historical observations. The exceptions are Units 9 and 17 where the season for Alaska hare is currently closed.

The statewide Small Game Program (SGP) has three primary responsibilities including research, management, and outreach. Recent research results are briefly described within the specific species sections. Management efforts largely focus on spring breeding and summer brood surveys, harvest composition, recommendations to the Alaska Board of Game (BOG) regarding regulatory proposals, and addressing concerns from staff and the public. Specific survey methods are fully described in Merizon and Carroll (2023). Survey and research efforts occur across the state from Nome to Ketchikan and along the road system from the Steese Highway south to the Kenai Peninsula. Outreach and education efforts focus on recruiting new hunters, providing hunters with tips, recommendations, and insight into Alaska's small game species.

This report summarizes the activities conducted by the SGP during the 2024 regulatory year (RY24, 1 July 2024–30 June 2025) in addition to brood survey results from summer 2025. Specifically, it addresses: 1) 2024-25 weather patterns, 2) species status including spring 2025 breeding and preliminary summer 2025 brood survey results, and RY24 harvest composition, 3) research updates, 4) recent BOG regulatory changes, and 5) new developments and outreach efforts. A more thorough multi-year management report is available (2022) or will be available (late 2025) at https://www.adfg.alaska.gov/index.cfm?adfg=smallgamehunting.research).

For clarity when reading this summary we regularly report data from large geographic areas including the Interior (Game Management Units [GMUs] 12, 19-21, 24, and 25), Southcentral (GMUs 6, 13A, 13D, 14, and 16A), the Alaska Range (9A, 9B, 11, 13B, 13C, 13E, and 16B), and the Kenai Peninsula (GMUs 7 and 15).

2024 / 2025 Weather

June 2024 was warm and dry for much of the state with the 2nd warmest June recorded for Bettles and 3rd warmest June for Fairbanks, which resulted in an increase in fire activity and poor air quality during the latter half of June and into early July of 2024 (Alaska Climate Research Center 2025). For the remainder of July 2024, it was cool and wet throughout most of the state. August 2024 weather was variable across the state with cooler temperatures in Western Alaska but warm temperatures in Northern Alaska and in Southeast. December 2024 was warmer and drier than average across much of the state with above average snowfall for Fairbanks. Snow cover was present throughout much of Alaska by late November 2024 but by February 2025 warmer temperatures and heavy rain had decimated the snowpack in many areas, especially in Southcentral around Anchorage. March 2025 was relatively warm in Northern Alaska and the Interior but cool in Western Alaska and snowy near Anchorage. April 2025 saw heavy rain in Southcentral but above average temperatures for the Interior. May 2025 was cool for much of the state and very wet in Southeast, with Ketchikan recording the wettest May on record. June 2025 was dry in the Interior, which brought about numerous wildfires after widespread lightning strikes in mid-June.

From 2017 to 2022 a spruce bark beetle (*Dendroctonus rufipennis*) outbreak decimated many large stands of mature (≥15cm diameter) white spruce (*Picea glauca*) throughout Southcentral and the Kenai Peninsula. Much of the Matanuska-Susitna valley (Mat-Su) was severely affected in addition to portions of the Anchorage bowl. Data from 2023 through 2025 indicate spruce bark beetle activity has declined throughout much of the state (J. Moan, Entomologist, United States Forest Service, Anchorage, personal communication). However, the loss of spruce grouse habitat may have had and may continue to have a strong negative effect on spruce grouse populations throughout Southcentral and the Kenai Peninsula over the coming years and has increased the wildfire risk in affected areas.

Species Status

Ruffed Grouse

Spring breeding surveys were completed at long-term monitoring sites near Palmer, Delta Junction, Anderson, Fairbanks, and Tok. Surveys were conducted from 27 April-13 May 2025 in Interior Alaska and 19 April to 10 May 2025 in the Mat-Su. Survey conditions in the Interior were generally good with relatively light winds and cool morning temperatures but relatively warm nighttime temperatures. Conditions along survey routes in the Interior were good with little snow remaining unlike the previous 2 springs. Survey conditions in Mat-Su were generally good and spring leaf-out seemed 1-2 weeks ahead of forests around Anchorage. Routes in the Mat-Su were largely devoid of snow by late March after a winter with minimal snow at lower elevations. The average number of drumming males heard along survey routes in the Interior near Anderson, Fairbanks, and Tok suggest ruffed grouse numbers have been increasing for the last few years. Surveys near Delta Junction showed a slight increase in ruffed grouse numbers. The average number of drumming males heard on survey routes in the Mat-Su increased in 2025 and was only slightly below the most recent high documented in 2018.

The proportion of juveniles in the harvest (based on hunter harvested wing donations) is used as a relative index of chick survival and recruitment (Merizon and Carroll 2023). In Southcentral, the number of wing donations in RY24 (n = 5) was similar to RY23 (n = 6) and below the long-term average (n = 18; 2011-2023). The low sample size precludes a reliable estimate of the proportion of juveniles. In the Interior the number of wings received in RY24 (n = 44) was similar to the long-term average (n = 46; 2011-2023) but less than the number received in RY23 (n = 57). The proportion of juveniles in the harvested sample from the Interior in RY24 (0.70) was below RY23 (0.88, n = 57). The data suggests chick survival may have been lower in 2024. However, the relatively small sample sizes across a large geographic area of collection warrants caution in drawing strong conclusions about population trends from the wing data alone.

Overall, spring breeding surveys in 2025 coupled with warm and dry weather conditions in the Interior and fairly warm and dry conditions in Southcentral during the early brood rearing period (mid-June to early July) suggest hunters may expect to see more ruffed grouse in both the Interior and Southcentral regions this year.

Sharp-tailed Grouse

The SGP conducted annual spring breeding surveys near Delta Junction from 19-26 April 2025 and near Tok from 27-29 April 2025. Survey conditions were generally good with light winds and cool temperatures. Snow conditions were similar to the long-term average during spring 2025 and did not hamper access to leks.

The average number of male sharp-tailed grouse estimated per lek near Delta Junction was higher in 2025 (5.6 males per stop) than 2024 (4.6 males per stop) and the 2025 estimate was higher than the previous 5-year moving average (3.3 males per stop; 2020-2024). The average number of male sharp-tailed grouse estimated near Tok was similar in 2025 (6.1 males per stop) compared to 2024 (5.9 males per stop) and

above the previous 5-year moving average (3.8 males per stop; 2020-2024). The number of active leks near Delta Junction in spring 2025 was 25, which is more than the 23 active leks recorded in 2024 and above the 5-year moving average of 21 active leks (2020-2024). The number of active leks observed near Tok in spring 2025 (5) was similar to 2024 (6). For clarity, a lek is defined here as an area with ≥ 1 male sharp-tailed grouse observed displaying in at least 2 consecutive years. A lek is considered inactive or abandoned when no males are observed displaying for 5 consecutive years.

The SGP had been conducting brood surveys for sharp-tailed grouse and ptarmigan since 2016. Data from brood surveys provides information on nest success, chick survival, and recruitment into the population just prior to the hunting season. Warm, dry weather conditions throughout June and into early July are ideal conditions for good chick survival. Sharp-tailed grouse brood surveys were not completed near Delta Junction in 2025 and SGP staff are evaluating whether to discontinue the surveys or revise the survey design due to recent fencing on private lands and the relatively few broods observed each year since 2020.

There were more sharp-tailed grouse wings donated from hunters throughout the Interior in RY24 (n = 104) than in RY23 (n = 95). The number of wings donated in RY24 was also higher than the long-term average (n = 78; 2011-2023). The proportion of juveniles in the harvest calculated from donated wings was lower in RY24 (0.58) compared to RY23 (0.79). Most of the wing donations from the Interior come from Unit 20D (72% in RY24 and 69% in RY23). Therefore, the data suggests juvenile production during the summer of 2024 in Unit 20D was likely down compared to summer 2023 but whether that applies throughout the Interior is less clear due to limited samples from other areas.

Considering spring breeding densities of sharp-tailed grouse were up near Delta Junction and Tok and weather conditions were warm and dry throughout June and early July; hunters should expect to see good numbers of sharp-tailed grouse while afield in the Interior for the 2025-26 hunting season.

Sooty Grouse

Spring breeding surveys were completed in Juneau, Petersburg, and Ketchikan between 7 April and 24 May 2025. No breeding surveys were completed near Haines in 2025. The spring breeding estimate of the number of singing males (“hooters”) per stop near Juneau was down in 2025 (1.1 males per stop) compared to 2024 (1.7 males per stop), stayed the same near Petersburg (1.8 males per stop), and increased near Ketchikan from 2024 (1.1 males per stop) to 2025 (1.6 males per stop). The 2025 estimate near Ketchikan is the highest recorded since surveys were initiated there in 2020.

More sooty grouse wings were donated to the SGP in RY24 (n = 28) compared to RY23 (n = 14). However, the number of wings donated in RY24 was below the long-term average (n = 42; 2011-2023). The proportion of juveniles in the harvest calculated from donated wings was down in RY24 (0.61) compared to RY23 (1.0). Most of the sooty grouse wing donations come from Unit 1C (96% in RY24 and 100% in RY23). Small sample sizes warrant caution in drawing strong conclusions from the wing data; however, it is likely that juvenile production was better in RY23 than RY24 in Unit 1C near Juneau.

Southeast grouse hunters should anticipate good numbers of sooty grouse this fall near Petersburg and Ketchikan, but numbers may be lower near Juneau based on spring counts.

Spruce Grouse

Limited data are available for spruce grouse. Relative abundance projections are limited to inference made from wing donations and field observations. However, beginning in fall 2019, a roadside survey technique was initiated to develop an index of abundance in the Mat-Su. This technique has shown promise in its ability to provide an efficient and cost-effective means to index spruce grouse population abundance at a

localized scale. Fall roadside spruce grouse counts declined in Mat-Su from 2021 to 2023 but increased slightly in 2024.

Wing donations for spruce grouse throughout Southcentral and the Kenai Peninsula in RY24 (n = 66) were the same as that received in RY23 (n = 66) and below the long-term average (n = 166; 2011-2023). The proportion of juveniles in the donated wing sample from Southcentral and the Kenai Peninsula was 0.37 in RY24 compared to 0.44 in RY23, possibly suggesting another year of relatively poor juvenile production in RY24. The relatively small sample size across a large geographic extent warrants using caution when drawing strong conclusions from the wing data alone. While warmer weather experienced in Southcentral and on the Kenai Peninsula during the summer of 2024 likely had a positive influence on juvenile production overall, several hunters in Southcentral reported seeing few spruce grouse while afield during RY24. The number of donated wing samples from the Interior was down in RY24 (n = 115) compared to RY23 (n = 165) but higher than the long-term average (n = 103; 2011-2023). The proportion of juveniles in the harvest in RY24 (0.63) was similar to RY23 (0.69) and has stayed relatively consistent since RY20.

In 2025, Southcentral spruce grouse populations may be negatively affected by the ongoing and widespread spruce bark beetle infestation throughout the region. Similar to the weather during the second half of June and early July of 2024, conditions have been relatively warm and dry during the same period in 2025, which may have improved production and recruitment of juvenile spruce grouse in Southcentral. Furthermore, warm and dry weather in the Interior during the critical brood-rearing period likely had a positive impact on chick production for spruce grouse and Interior hunters are likely to see good numbers of spruce grouse during RY25.

Rock Ptarmigan

Rock ptarmigan spring breeding surveys occurred from 24 April to 16 May 2025 throughout the Kenai Peninsula, Chugach Mountains, and Alaska Range. No survey was conducted in the White Mountains in 2025. The spring breeding estimate of abundance for rock ptarmigan on the Kenai Peninsula in 2025 (0.7 males per stop) was up slightly from 2024 (0.6 males per stop) and comparable to the previous 5-year average (0.7 males per stop; 2020-2024). The estimate for the Chugach Mountains in 2025 (0.4 males per stop) was below the estimate from 2024 (0.5 males per stop). The survey estimate for rock ptarmigan in the Alaska Range in 2025 (0.3 males per stop) was above the estimate from 2024 (0.2 males per stop) and comparable to the previous 5-year-average (0.3 males per stop). Survey data from 2025 indicate rock ptarmigan are increasing near Mount Fairplay (2.4 males per stop) in the eastern Interior compared to 2024 (1.8 males per stop). The estimate from Mount Fairplay is the highest on record since surveys were initiated in 2015.

Sixty-nine harvested rock ptarmigan wings were donated from hunters in RY24. These samples were spread over a very large geographic area with the most wing samples coming from Unit 22D near Nome (n = 14), Unit 25C near Fairbanks (n = 11), and Units 14A (n = 8) and 14C (n = 9) near Palmer and Anchorage. Drawing any conclusions about juvenile production for a given area from this sample is very difficult.

Brood surveys for rock ptarmigan were completed between 15 July and 9 August 2025 from Eagle Summit south to the Kenai Peninsula (including Denali Highway, Sheep Mountain, Hatcher Pass, and Chugach State Park). Very few rock ptarmigan are typically observed on brood survey routes along the Denali Highway which are primarily focused on willow ptarmigan, however, in 2025 6 rock ptarmigan were observed along Denali Highway brood survey routes. This was fewer than the 37 rock ptarmigan observed in 2024. Surveys near Eagle Summit were completed on 1 to 3 August 2025. Six groups of rock ptarmigan were observed (33 total rock ptarmigan) along survey routes. Five of the 6 groups encountered were broods and the average

number of chicks per brood was 5.2. At the time of publication, data was unavailable from the majority of brood survey locations in CSP, Hatcher Pass, and the Kenai Peninsula. Again, the data for these areas is currently incomplete, but rock ptarmigan populations in these areas likely benefited from warmer and drier weather during the brood-rearing period of 2025.

Overall, hunters can likely expect to see good numbers of rock ptarmigan in the Interior and possibly into the Alaska Range but likely fewer in Southcentral and on the Kenai Peninsula.

White-tailed Ptarmigan

Beginning in summer 2021, increased brood survey effort was employed throughout Southcentral Alaska for white-tailed ptarmigan. In addition to hunter harvested wing donations the brood survey data affords a better understanding of white-tailed ptarmigan chick survival and subsequent population productivity throughout the Chugach, Kenai, and Talkeetna mountains. In 2025, brood surveys were completed in white-tailed ptarmigan habitat in CSP, Hatcher Pass, and on the Kenai Peninsula, although data was incomplete at the time of publication and therefore it is unknown what hunters can expect to find in these areas for white-tailed ptarmigan numbers. Nonetheless, both Southcentral and the Kenai Peninsula experienced comparably warmer and drier weather in 2025 than in 2024 during the brood-rearing period, likely having a positive impact on chick survival.

Twenty-nine white-tailed ptarmigan wings were donated to the SGP in RY24 with 97% of the wings coming from the Southcentral region. The proportion of juveniles in the sample from Southcentral in RY24 (0.31) was lower than RY23 (0.50). Again, due to the large geographic extent of the sample it is very difficult to make meaningful inference from the harvest data alone.

Despite the limited data at time of publication, the warm and dry weather throughout Southcentral and the Kenai Peninsula may have helped production and recruitment of white-tailed ptarmigan in 2025.

Willow Ptarmigan

Willow ptarmigan spring breeding surveys occurred from 23 April to 19 May, 2025 throughout the Kenai Peninsula, Anchorage Bowl, the Alaska Range, near Nome, and within the Tanana Valley. The 2025 spring breeding estimate (1.8 males per stop) was down from 2024 (2.5 males per stop) within the Anchorage Bowl. The spring breeding estimate for willow ptarmigan along the eastern Denali Highway (Unit 13B) in 2025 (1.8 males per stop) was above the 2024 estimate (1.4 males per stop), and above the previous 5-year-average (1.2 males per stop). The 2025 estimate (1.2 males per stop) from the western Denali Highway (Unit 13E) was similar to the 2024 estimate (1.2 males per stop), and higher than the previous 5-year-average (0.7 males per stop). The Denali National Park (DNP) estimate for 2025 (3.7 males per stop) was slightly below both the 2024 estimate (3.9 males per stop) and the previous 5-year-average (3.1 males per stop), but is the second highest estimate recorded since surveys were initiated in 2014. Surveys of willow ptarmigan near Delta Junction within the Donnelly Training Area (DTA) and near Mount Fairplay near Tok suggest numbers are likely increasing. Only 1 willow ptarmigan survey was completed near Delta Junction in 2024 (0.4 males per stop) and the relative abundance estimate changed little from 2023 (0.4 males per stop) suggesting willow ptarmigan numbers near Delta Junction continue to remain relatively stable at low density. The 2024 estimate (2.0 males per stop) for willow ptarmigan near Mount Fairplay showed a large increase over the estimate from 2023 (0.8 males per stop) and is above the previous 5-year-average (0.6 males per stop). Willow ptarmigan numbers throughout Southwestern Alaska appear to be rebounding according to field staff reports from early 2025.

Summer brood surveys were completed between 15 July and 3 August 2025 along the Denali Highway, Sheep Mountain, Hatcher Pass, CSP, and the Kenai Peninsula. Although brood surveys near Eagle Summit largely target rock ptarmigan a few willow ptarmigan broods are often seen each year. Denali Highway brood surveys documented 8 willow ptarmigan brood groups on transect where age composition could be determined. For the brood groups with a known composition, the number of chicks per brood (4.5 chicks per brood average) was comparable to the average brood size recorded in 2024 (4.5 chicks per brood average). Four groups of willow ptarmigan (29 total willow ptarmigan) were recorded on transects near Eagle Summit, which was higher than the 1 group (7 total willow ptarmigan) observed in 2024 and similar to the number of groups observed in 2022 (4 groups with 16 total willow ptarmigan). Two of the 4 groups were brood groups and the average number of chicks per brood was 3.5 in 2025. At the time of publication, data from the majority of the Southcentral brood survey locations was unavailable. However, willow ptarmigan populations in these areas likely benefitted from warmer and drier weather during the brood-rearing period of 2025.

Three-hundred and eighty-three hunter-harvested willow ptarmigan wings were collected statewide during RY24. Samples were collected primarily from the Seward Peninsula (n = 140), the Alaska Range (n = 113), and the Southcentral region (n = 76). Only 27 willow ptarmigan wings were donated from the Interior in RY24. The proportion of juveniles in the harvest went up from RY23 (0.64) to RY24 (0.72) in Southcentral, stayed the same between RY23 (0.63) and RY24 (0.63) for the Alaska Range, and declined from RY23 (0.78) to RY24 (0.69) for the Seward Peninsula.

Overall, in 2025 hunters are likely to encounter more willow ptarmigan throughout much of the Alaska Range and Interior and possibly fewer in Southcentral. There may be fewer willow ptarmigan on the Seward Peninsula in 2025 due to cool and wet weather that occurred during the brood rearing period (mid-June through early July).

Alaska Hare

Following a research project (2018-2022) that documented low to very low abundance of Alaska hare in Units 17, 22, and 23, the SGP is working to continue long-term monitoring of the species. In 2025 snowmachine surveys to collect fecal pellets were conducted in Unit 17 and were planned for Unit 22 but were not completed there due to lack of snow during staff availability. The data from fecal pellets collected from Unit 17 is not yet available. Based on field reports from hunters and ADF&G staff, although there has been a slight uptick in the number of sightings of Alaska hare, it appears that the hare populations continue to remain at low density in Southwest and Western Alaska.

Snowshoe Hare

In the Interior, snowshoe hare populations peaked in 2018-19 and have hit the low of their normal 10-year population cycle and annual counts indicate those numbers continued to remain low through spring 2025. However, field reports from ADF&G staff this summer suggest snowshoe hare numbers are increasing in the Interior. In Southcentral, hare populations around Anchorage peaked in 2020-21 and are likely starting to increase from the population low. On the Kenai Peninsula, the peak in the snowshoe hare cycle is often 2-3 years after the peak in the FIRS region and 1–2 years after the peak along the Southcentral road system region. Based on hare pellet counts conducted annually on the Kenai National Wildlife Refuge completed by the United States Fish and Wildlife Service (USFWS), population density most recently peaked in 2022, and likely declined during winter 2024–2025.

Regulatory Changes

At the Central & Southwest Region BOG meeting in January of 2025 the BOG passed a proposal that delayed the start date for the ptarmigan hunting season in Unit 13B by 10 days from August 10th to August 20th, while retaining the same bag and possession limit. The BOG also passed a proposal to close the hunting season for Alaska hare in Units 9 and 17 as data suggests low to very low abundance of Alaska hare across much of the species range. These regulations will take effect during the upcoming 2025-26 hunting season.

The next BOG meetings are scheduled for January 2026 in Wrangell (Southeast Region) and March 2026 in Kodiak (Southcentral Region). There were 4 proposals submitted for consideration at the Southeast Region BOG meeting in January 2026 and 0 submitted for the Southcentral Region BOG meeting in March 2026. For the upcoming BOG meeting schedule and the list of proposals to be considered please visit the BOG webpage at: www.boardofgame.adfg.alaska.gov and select "Meeting Information" from the list of options.

Public Involvement and Support

The dedication of numerous veteran and new volunteers and their trained pointing dogs continues to allow the annual volunteer-based brood survey project to grow. This collaboration between the SGP and volunteers documents annual chick survival for sharp-tailed grouse and rock, white-tailed, and willow ptarmigan throughout the road system of Alaska. Engaged volunteers and their highly trained pointing dogs are recruited to locate and enumerate broods along survey routes. Survey locations have historically included Eagle Summit (Steese Highway), Delta Junction, Denali Highway, Hatcher Pass, Chugach State Park, and the Kenai Mountains. Since 2021, volunteer hours have been used to match federal Pittman-Robertson funds that have allowed and will continue to allow the SGP to further increase overall population monitoring efforts and research. New participants are always welcome and encouraged to join the project. If you are interested in participating in this program as a future volunteer, please contact Cameron Carroll in Fairbanks (907.459.7237) or Tim Spivey in Anchorage (907.267.2897).

The statewide wing collection program continues to have widespread support among hunters. This program allows biologists to gain valuable insight into the harvest composition (age, sex, species, and Unit of harvest) of numerous hunted populations of grouse and ptarmigan. Please consider donating your harvested grouse and ptarmigan wings, it is often the only way the SGP can gather important biological information across Alaska. If you're interested in participating, at no cost, please contact your local ADF&G office or SGP staff for free wing envelopes.

References

Alaska Climate Research Center. 2025. Monthly reports for Alaska. https://akclimate.org/data/monthly-reports/ (Accessed July 21, 2025).

Merizon, R.A. and C.J. Carroll. 2023. Status of grouse, ptarmigan, and hare in Alaska, 2021 and 2022. Alaska Department of Fish and Game, Wildlife Management Report ADF&G/DWC/WMR-2023-2, Juneau.