Ring-necked Pheasant Action Plan, 2024–2028

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

WILDLIFE DIVISION REPORT TBD

DATE 2024

This action plan will be used by South Dakota Department of Game, Fish and Parks staff 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.

A supportive document to this action plan, the "Management of Ring-necked Pheasant in South Dakota," provides a historical background, research, management surveys and population monitoring, best management practices, challenges and opportunities related to ring-necked pheasant and can be found at https://gfp.sd.gov/management-plans/.

ACKNOWLEDGEMENTS

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PUBLIC INVOLVEMENT

A draft of the "South Dakota ring-necked pheasant action plan" was available for public comment from INSERT DATES HERE.

INTRODUCTION

The diverse landscape of South Dakota is characterized by an array of habitats and abundant natural resources. For many outdoor enthusiasts, no other wildlife species in the state is as recognized or valued as the pheasant. Though the ring-necked pheasant (*Phasianus colchicus*; hereafter, pheasant) is not native to South Dakota, they have become naturalized to the mosaic of grassland and agricultural land habitat found in much of the state.

From the first successful releases of pheasants in 1908 to the most recent estimated population of over 7.1 million birds in 2018, South Dakotans and our visitors have built a rich and deeply rooted tradition around pheasants and pheasant hunting. The opening weekend in October is an event anticipated not only by pheasant hunters, but also family and friends who are reunited during this social gathering.

With a high rate of annual mortality, pheasants are a short-lived bird with the capability of high reproductive rates. The quantity, quality, and distribution of season-specific habitats and weather conditions are the primary factors that influence pheasant populations. As a result, wildlife managers focus on the development and management of suitable habitat to meet the needs of pheasants throughout their annual life cycle, including nesting, brood-rearing, and winter cover.

Since their introduction and expansion in areas of interspersed cropland, grassland and other habitats, pheasant populations have been notably high on 4 occasions: the early 1930s following the Great Depression and drought period when much farmland was idle; the mid-1940s during and just after World War II when again much habitat was unintentionally created on idled cropland; the early 1960s at the peak of the Soil Bank Program; and most recently, during the first 10 years of the 21st century, as a result of the Conservation Reserve Program (CRP) acres and favorable weather conditions. Periods between these population peaks experienced large scale declines in available upland habitat across much of the pheasant range.

Pheasant management in South Dakota primarily involves: working with cooperating agencies and landowners to develop and manage quality pheasant habitat; monitoring populations through harvest surveys and hunter satisfaction; and developing season structures that allow harvest of surplus roosters and maximum hunter participation. August roadside surveys, otherwise known as pheasant brood surveys, were conducted to develop a population index and fall pheasant hunting forecast. This survey was discontinued in 2020 to focus on a new department priority promoting habitat and access. Currently, South Dakota Game, Fish and Parks (GFP) uses hunter harvest surveys to evaluate pheasant and pheasant hunter demographics. Significant efforts by wildlife managers, biologists, and private landowners to develop and manage pheasant habitat, and provide access on both public and private lands are the current focus of GFP. In addition, a wealth of knowledge has been obtained through previous research and survey results on pheasant biology and their response to various habitat management techniques and land use changes.

While South Dakota historically and currently supports high pheasant populations, there could be significant issues and challenges ahead for South Dakota's state bird. The loss of high-quality habitat provided by CRP, accelerated conversion of native prairies and wetlands to cropland agriculture, reduction in acres and funding available for conservation programs in the Farm Bill, changing of landowner and hunter demographics, budget and funding sources, and the need for additional public hunting access are issues that face wildlife managers today that will continue in the future.

Held in public trust, GFP is responsible for the conservation and management of pheasants and their associated habitats for the benefit of this wildlife resource and for the citizens and visitors of this state. Undoubtedly, the strategic and responsible conservation practices intended for pheasants will have benefits to other wildlife species located in South Dakota. Therefore, a proactive approach is necessary to address these emerging issues to ensure abundant pheasant populations will be available to provide and support our hunting heritage for present and future generations.

HUNTER HARVEST SURVEYS

Pheasant harvest has been estimated since the inaugural pheasant season established in 1919. As many as 6,439,000 pheasants have been harvested in a single season (1944), although season lengths have differed through time. The hunter harvest surveys are conducted annually and sent to approximately 15,000 residents and 15,000 nonresidents. Small game license holders are randomly selected and surveyed to estimate total harvest, number of days hunted, harvest distribution, and hunting satisfaction. No shooting preserve license holders are surveyed for these estimates and none of their harvest is included in any data for estimates regarding pheasant harvest. Historic survey response rates are approximately 30% for resident and nonresident hunters.

HUNTER AND HARVEST TRENDS

As expected, there is correlation between pheasant populations, pheasant harvest, and the number of pheasant hunters. An estimated 1,000 hunters participated during the inaugural pheasant season in 1919, with approximately 212,000 hunters participating during the high pheasant year of 1963. During the past 10 years (2013–2022), the average number of residents, nonresidents and total hunters are reported as 56,712, 72,843, and 129,555, respectively (Figure 1). During the same seasons of 2013−2022, pheasant harvest averaged 1,054,900 with a high of 1,255,878 in 2015 (Figure 2).

HABITAT AND ACCESS

Pheasants are a product of South Dakota's diverse agricultural landscape and pheasant populations are strongly associated with land use trends and farmland habitat. In addition to the effects of weather conditions, the quantity, quality, and interspersion of habitat types are major factors in the seasonal and annual survival and reproductive capability of pheasants. Since much of the land base in South Dakota is privately owned (80%), private landowners are the primary stewards of habitat and the wildlife it supports. Recognizing that high quality habitat on private land is necessary to sustain good pheasant populations, GFP has focused much effort on agricultural land use issues (e.g., Federal Farm Bill and agricultural policy), as well as habitat development and management on private land. This collaborative approach between private landowners, GFP, and other conservation partners has been and will continue to be critical in providing excellent pheasant management and public hunting opportunities at a statewide level.

GFP delivers a comprehensive private lands habitat and access program, with numerous options available to private landowners for habitat management and development. Cost-share and incentive programs, as well as technical assistance, are available for food habitat plots, woody habitat, habitat fencing, grass seedings, grazing systems, wetland creations, wetland restorations, and riparian area enhancement (Table 1). GFP added an additional eight private lands habitat biologists to the existing four in late 2021 to increase the delivery of these habitat programs and promote public access options to landowners across South Dakota. Extensive

descriptions of these conservation programs can be found on the Private Lands page of GFP's website (https://gfp.sd.gov/landowner-programs/).

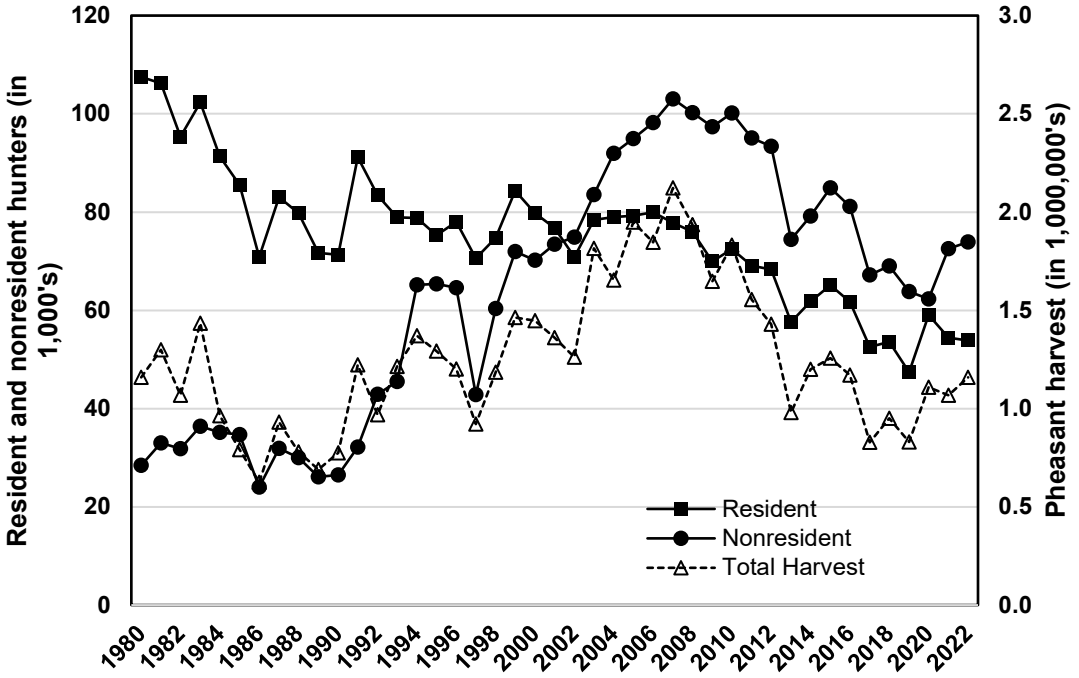

Figure 1. Total pheasant harvest and resident and nonresident hunters, 1980−2022.

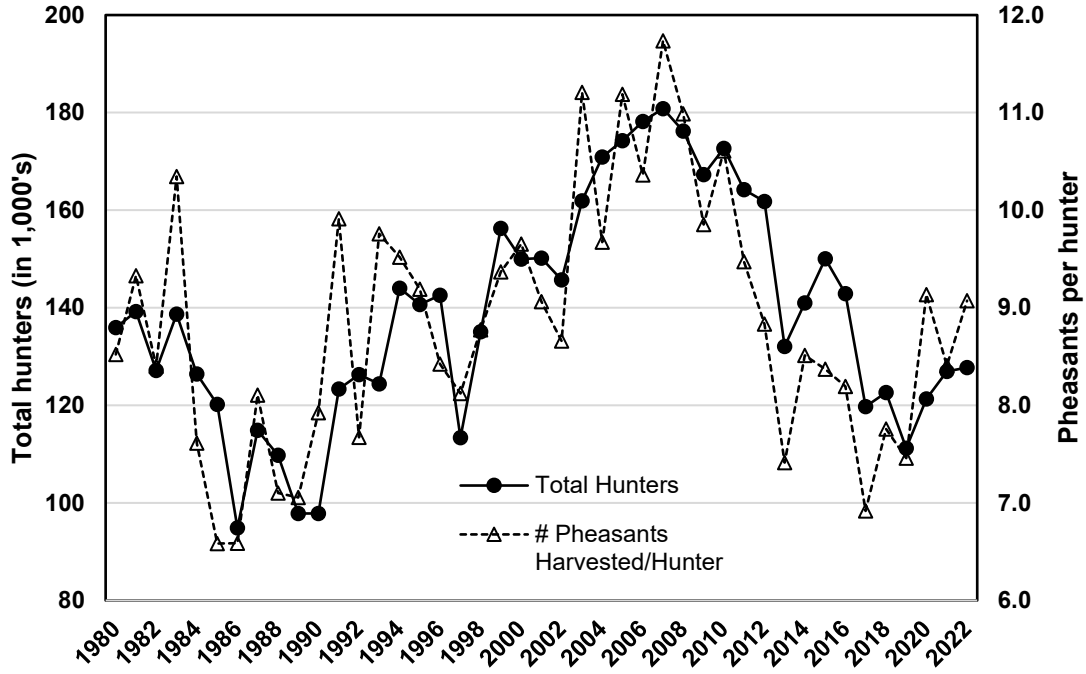

Figure 2. Total pheasant hunters and pheasants harvested per hunter, 1980−2022.

Table 1. Statewide totals for cost-share and incentive project types delivered by South Dakota Department of Game, Fish and Parks' Private Lands Habitat Biologists, 2020−2023. Wetland enhancements and woody cover project types are measured by the total number of projects. Grassland restoration is measured by the number of acres restored. Food plot is measured by the number individual of food plot cooperators.

Project type	2020	2021	2022	2023	Average[a]
Wetland enhancement	2	3	1	10	4
Grassland restoration	1461	328	370	1331	873
Food plot	940	1019	933	907	950
Woody cover	54	41	31	41	42

[a] Rounded to nearest value

SECOND CENTURY INITIATIVE

Pheasant hunting is a major economic source for South Dakota, as well as a significant contributor to tourism. Revenue from pheasant hunting makes a difference in many rural communities for families and small businesses. The heritage associated with pheasant hunting is deeply engrained in South Dakota's culture. To ensure this heritage lives on, Governor Kristi Noem committed to conserving South Dakota's natural resources by proactively enhancing and establishing habitat through the Second Century Initiative, which launched in 2019.

This initiative is a strategy to increase resources for habitat management. As part of this plan, a $1 million state investment was implemented to expand habitat and pheasant hunting opportunities. The South Dakota Legislature approved this bill so these dollars can be used to leverage additional funds from private donations and federal conservation programs.

Additionally, on April 1, 2019, GFP launched the nest predator bounty program. The primary goals of this program were to increase trapping education and awareness, getting youth and families outside, and enhancing duck and pheasant nest success. Participation is open from March 1 to July 1 for resident youth under 18 and April 1 to July 1 for all South Dakota residents, or until the maximum annual payout of $500,000 is reached. Eligible species to be taken include raccoon, striped skunk, badger, opossum, and red fox. To date, over 240,000 nest predators have been removed and recorded during this program.

A Hunt for Habitat was also established under the Second Century Initiative to raise money for habitat efforts across South Dakota through raffle licenses. To learn more, visit https://gfp.sd.gov/hunt-for-habitat/. A crowdsourcing effort for habitat solutions launched in February 2019 and sparked a conversation that led to over 750 emails and an online dialogue that had over 300 group members thinking, talking, and exploring habitat solutions.

MANAGEMENT OBJECTIVES AND STRATEGIES

Objective 1: Provide hunting access to quality pheasant habitat on public and private lands.

Strategies:

1.1 By 2026, develop a web-based tool to inform interested hunters on harvest and public land availability to better inform hunters of potential pheasant hunting locations.

1.2 Annually lease an additional 5,000 acres of private land for public hunting to provide high quality pheasant hunting opportunities through the James River Watershed CREP, Big Sioux Watershed CREP, or the Walk-in Area program.

- *1.2.1* Provide financial commitment to the 82,000 acres enrolled in the James River Watershed CREP and utilize funding sources as they become available to enroll the project goal of 100,000 acres.
- *1.2.2* Provide financial commitment to the project goal of 25,000 acres to be enrolled in the Big Sioux River Watershed CREP.

Objective 2: Promote the establishment, restoration, and enhancement of high-quality habitats critical for pheasants on state-owned Game Production Areas (GPAs).

Strategies:

2.1 Where pheasants are the primary habitat management species, best management practices for pheasant habitat management (page *17* in the Management of Pheasants in South Dakota document) will be used with discretion to guide development and updates of GPA management plans within fiscal, biological, and land use constraints.

2.2 Evaluate and improve existing woody habitat design on GPAs. Adjust woody habitat accordingly to improve overall winter habitat according to best management practices for pheasant habitat management (page *19* in the Management of Pheasants in South Dakota document).

- *2.2.1* Renovate existing woody habitat deemed appropriate in size and configuration with the addition of low growing tree or shrub rows to improve thermal cover.
- *2.2.2* Replace existing woody habitat that does not meet the appropriate best habitat management criteria, with a high diversity grass and forb planting or a new woody habitat planting that meets best habitat management criteria.

2.3 Evaluate and improve current nesting and brood rearing design on GPAs, while striving for large (> 40 acres) unfragmented blocks of grassland.

- *2.3.1* During grassland restorations, use grassland management techniques that promote diversity of grassland species.
- *2.3.2* When establishing grassland habitat, use diverse seed mixes considering fiscal and logistical constraints.

2.4 Evaluate existing food plot design and landscape position to optimize pheasant survival and production relative to adjacent nesting cover.

2.4.1 Replace food plots in undesirable locations with high diversity grass and forb plantings to function as brood habitat.

2.4.2 Explore the utility of second-year food plots in locations with lower pheasant and deer use.

2.5 Maintain existing partnership with Habitat Forever/Pheasants Forever to fund the appropriate level of habitat specialist positions to conduct habitat work on GPAs.

2.6. Foster relationships with adjacent landowners and local Conservation Districts to assist with habitat renovation, maintenance, and establishment on GPAs.

Objective 3: Protect and enhance pheasant habitat on private lands.

Strategies:

3.1 Continue to support the Second Century Initiative to promote pheasant management and raise funds for the enhancement and restoration of pheasant habitat.

3.2 Strive for at least 1 million acres of undisturbed CRP grassland habitat on private lands in South Dakota through the duration of this action plan.

3.2.1 GFP Private Lands Biologists will provide technical assistance to landowners interested in new and re-enrollment CRP options while also providing technical assistance to current CRP participants for management options of existing contracts that benefit pheasant habitat.

3.2.2 Continue to advocate for the strategic use of existing and new continuous CRP practices that provide quality pheasant nesting habitat and/or establish/maintain adequate thermal cover to improve winter survival.

3.3 Double the previous 4-year average to annually complete eight wetland restorations/creations through the department cost-share programs to provide dense emergent vegetation for winter cover habitat.

3.4 Increase the previous 4-year average by 35% to annually restore 1,200 acres of grassland habitat through department cost-share programs while also providing technical and financial assistance for proper grassland management.

3.5 Increase the previous 4-year average by 150 cooperators to annually strive for at least 1,100 Food Plot Program cooperators.

3.5.1 Work with existing cooperators on proper food plot design and landscape position that optimize pheasant survival and production.

3.5.2 Provide education and outreach on the utility, proper size, and location of food plots through various media outlets.

3.6 Increase the previous 4-year average by 55% to annually strive for at least 65 Woody Habitat Program cooperators.

3.6.1 Provide education and outreach on the utility, proper size, and location of woody habitat relative to other winter cover sources and nesting/brood rearing habitat through various media outlets.

3.6.2 Focus on supplementing the current woody conservation practice Field Windbreak Establishment (CP5A) and renovating shelterbelts outside of Conservation Reserve Program practices by providing technical and financial assistance to add additional and/or replacement rows of woody cover while meeting GFP's Woody Habitat Program Guidelines.

3.7 Annually work with Pheasants Forever Farm Bill Biologists, local United States Department of Agriculture offices, United States Fish and Wildlife Service, and other partners to promote and deliver habitat cost-share programs and voluntary wetland and grassland easements in South Dakota.

3.7.1 When appropriate, provide pheasant habitat management training to willing conservation groups and partners for habitat cost-share programs.

Objective 4: Use and improve current population, harvest, and public opinion surveys to monitor population trends, economic impact of pheasant hunting, harvest levels, and hunter satisfaction.

Strategies:

4.1 Annually conduct and summarize hunter harvest surveys to project pheasant harvest, number of pheasant hunters, economic impact at a county level, and hunter satisfaction.

4.2 By 2028, improve existing population monitoring programs to develop survey methods to inform biologists on population status, reproductive success, and relative densities of pheasant populations. Use this information to develop an annual fall hunting forecast using a science-based approach while utilizing staff's technical expertise of pheasant reproductive ecology.