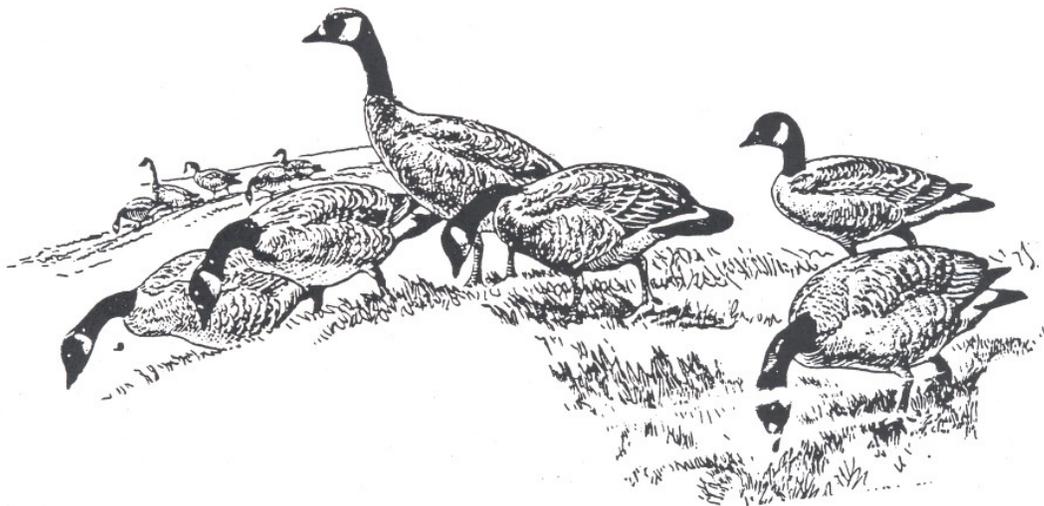


# SOUTH DAKOTA GIANT CANADA GOOSE ACTION PLAN 2021-2026



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

**WILDLIFE DIVISION REPORT 2021-04**

**MARCH 2021**

This action plan will be used by SDGFP 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 Giant Canada Geese in South Dakota”, provides a historical background, research, management surveys and monitoring, challenges and opportunities, and citizen involvement related to giant Canada geese and can be found at <https://gfp.sd.gov/management-plans/>.

## **ACKNOWLEDGEMENTS**

This action plan is a product of substantial discussion, evaluation and input from many wildlife professionals, constituents and the 2020-2021 South Dakota Canada Goose Stakeholder Group. In addition, those comments and suggestions received from private landowners, hunters and those who recognize the value of giant Canada geese and their associated habitats were also considered.

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Individuals who served on the South Dakota Canada Goose Stakeholder Group during this planning process included: Todd Tuchen (ag producer); Ben Fujan (hunter); James Halverson (South Dakota Stockgrowers Association); Dani Hanson (South Dakota Farm Bureau); Cody Warner (South Dakota Wildlife Federation); Brad Johnson (U.S. Fish and Wildlife Service); Brent Garvey (hunter); Ron Simonson (ag producer); Eric Reisenweber (Delta Waterfowl); Derrick Scott (South Dakota Soybean Association); and Chuck Dieter(South Dakota Waterfowl Association).

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

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## **INTRODUCTION**

Giant Canada geese (*Branta canadensis maxima*) historically nested across the Midwest of the United States and the northern Great Plains of North America including South Dakota. European settlers hunted Canada geese year-round and gathered their eggs in spring. Giant Canada geese were nearly extirpated from South Dakota by 1900. In fact, many authorities believed the giant Canada goose was extinct by the 1950's. However, flocks of the birds remained in the Ft. Sisseton and Waubay National Wildlife Refuge (NWR) areas of northeast South Dakota. Hanson (1965), in his book "The Giant Canada Goose" considered the birds in the Waubay area to be the "gold standard" of remaining wild giant Canada geese. Restoration efforts across its former range proved successful and efforts are now directed to manage this population. Giant Canada geese provide a valuable resource, highly sought after by South Dakota hunters and viewers alike.

The goal for giant Canada goose populations in South Dakota is to manage for maximum recreational opportunity consistent with the welfare of the population, habitat constraints and social tolerance. The South Dakota giant Canada goose population objective (three-year average spring index) is 140,000 with an objective range of 115,000-165,000 geese. SDGFP will adjust season structure and daily bag limits to best maintain the goose population within the objective range. This population range was developed based on an analysis of past goose population data, private land depredation issues, and substantial input from a variety of stakeholders interested in goose management in South Dakota.

Population and harvest surveys for South Dakota's giant Canada geese include the U.S. Fish and Wildlife Service (USFWS) May Waterfowl Breeding Habitat and Population Survey, the USFWS Parts Collection Survey, the federal Hunter Information Program survey, as well as SDGFP harvest surveys. Management direction for Canada geese will be based on a three-year average spring survey index number, other relevant biological data and social data.

The South Dakota Department of Game, Fish, and Parks (SDGFP) manage wildlife and their associated habitats for their sustained and equitable use, and for the benefit, welfare, and enjoyment of the people of South Dakota and its visitors. This action plan is intended to guide wildlife managers and biologists and aid the decision-making process of the SDGFP Commission to ensure Canada goose populations and their habitats are managed appropriately, addressing both biological and social considerations. It also serves to inform sportsmen and women, landowners, and all others interested in giant Canada goose management in South Dakota.

## **POPULATION STATUS**

Since restoration efforts ended in the mid 1990's, spring population estimates have varied from a low of 112,416 from 2004-2006 to a high of 248,135 from 2011-2013. Since Canada geese are highly dependent on wetlands for all phases of their life cycle, populations rise and fall in response to regional wetland conditions. The average annual spring population index of Canada geese in South Dakota for the 5-year period 2010-2014 was 216,536 and the most recent three-

year period where we have data (2017-2019) is 166,773 birds, according to data from the USFWS May Breeding Habitat and Population Survey. A statewide spring population index management range of 115,000-165,000 Canada geese should provide ample hunting opportunities and manageable agricultural conflicts, considering an operational SDGFP wildlife damage management program is in place to cooperatively work with private landowners.

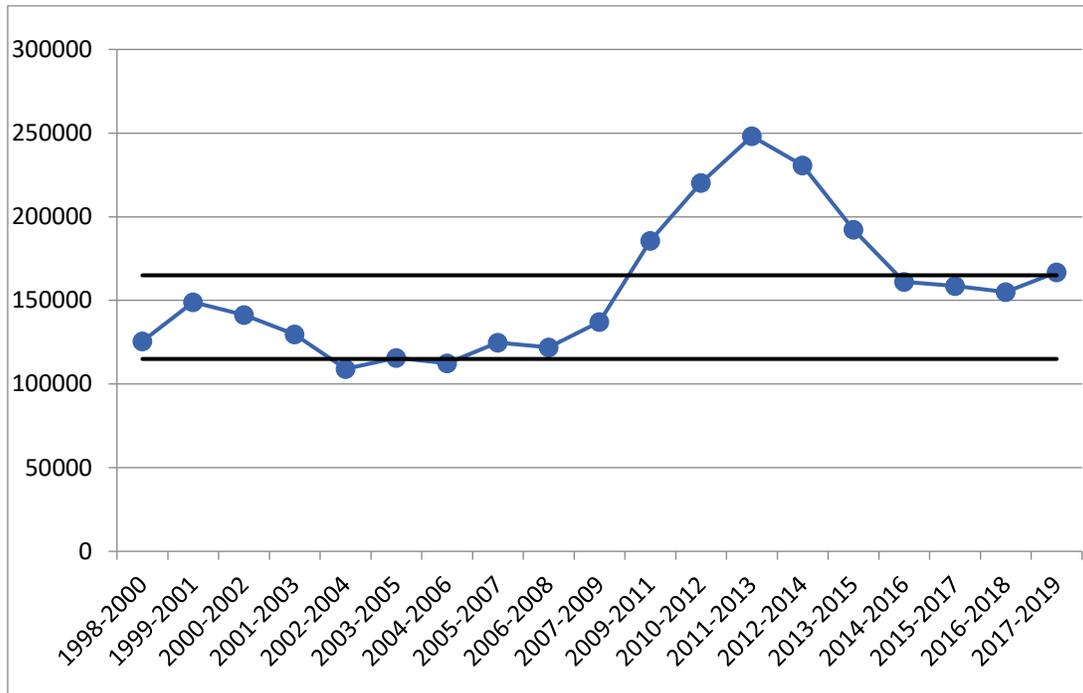


Figure 1. South Dakota Canada goose spring population index (three-year averages), 1998-2019.

The primary mortality factor for Canada goose populations in South Dakota is hunter harvest. Areas included in Unit 1 are primarily managed for locally breeding geese while Units 2 and 3 primarily target staging dark geese later in the season. When populations exceed objective levels, use of the full federal framework days and daily bag during early fall and regular Canada goose hunting seasons in Unit 1 are warranted (Table 1). The maximum number of days allowed for hunting Canada geese is 107 days. When populations are within the objective range of 115,000-165,000 using the full framework during the regular Canada goose hunting season in Unit 1 and adjusting bag limits/season lengths during the August Management Take and Early Fall season may be warranted. If populations fall below objective levels, season restrictions should be considered (Table 1). Operational goose banding will be maintained and is a cost-effective method to obtain harvest information, movement data and population vital rates for South Dakota’s Canada goose population.

Table 1. Canada goose management decision table.

"MANAGEMENT TOOLS"	RESTRICTIVE MANAGEMENT	MODERATE MANAGEMENT	LIBERAL MANAGEMENT
	<i>Increase Population</i>	<i>Maintain Population</i>	<i>Decrease Population</i>
Justification	<p>Canada goose population below objective based on available biological data, hunter survey comments, landowner comments, public comments, and field staff observations.</p> <p>Goose depredation on row crops is expected to be limited and should be adequately addressed through the wildlife damage management program.</p> <p>Non-lethal tools will primarily be used; however, unique situations may be addressed using nest work or kill permits.</p>	<p>Canada goose population at objective based on available biological data, hunter survey comments, landowner comments, public comments, and field staff observations.</p> <p>Manageable Canada goose depredation on row crops is expected but should be adequately addressed through wildlife damage management program.</p> <p>Non-lethal tools will primarily be used, but chronic depredation issues may be addressed using nest work and kill permits.</p>	<p>Canada goose population above objective based on available biological data, hunter survey comments, landowner comments, public comments, and field staff observations.</p> <p>Goose depredation on row crops is expected to be above desired levels. The wildlife damage management program has difficulty addressing requests in a timely manner. Non-lethal tools will be used, but nest work and kill permits may be used more frequently to stop row crop damage.</p> <p>Indicators for this category would be moderate to overabundant populations causing moderate to major depredation issues.</p>
Spring Population Index (3-Year Average)	Below 115,000	115,000-165,000	Above 165,000
Regular Season Days	Full Framework	Full Framework	Full Framework
Regular Season Daily Bag	Daily Bag: Unit 1: 3 - 5 Units 2 and 3: 4	Daily Bag: Unit 1: 5 - 8 Units 2 and 3: 4	Daily Bag: Unit 1: Up to 8 Units 2 and 3: 4
Early Fall Season (Unit 1)	Yes (Consider Restricting Season Length) Daily Bag: 3 - 5	Yes Daily Bag: 5 - 8	Yes Daily Bag: Up to 15
August Management Take	Not available except for human safety concerns.	Can be available in areas with unacceptable levels of crop depredation or human safety concerns. Daily Bag: 8	Can be available in areas with unacceptable levels of crop depredation or human safety concerns. Daily Bag: Up to 15

## **MANAGEMENT PRIORITIES**

In addition to management activities involved with implementing the harvest strategies found in Table 1, SDGFP will strive to accomplish the following management priorities:

### **Wildlife Damage Management Program**

SDGFP's Canada goose depredation abatement program and services are multi-faceted and designed to prevent and/or reduce crop damage caused by Canada geese. SDGFP's non-lethal abatement techniques include permanent fence, temporary electric fence, temporary and permanent vegetative barriers (i.e. wheat or grass buffer strips), food plots, and various hazing techniques (i.e. propane cannons, cracker-shells, kites and flagging, coyote decoys, and harassment). SDGFP also utilizes their Special state Canada goose permit obtained from the USFWS which allows SDGFP and its sub-permittees to conduct resident Canada goose management and control activities through egg addling, trapping, relocating, and lethal take of Canada geese in order to contribute to human health and safety, protect personal or public property, and prevent injury to people and property in accordance with all conditions specified in 50 CFR 21.26. This permit allows SDGFP the annual take of up to 9,000 Canada geese and 2,500 nests. Use of this permit varies due to the number of local birds, overall population levels, effectiveness of non-lethal techniques, severity of crop damage, and the history of crop damage at certain locations.

### **Recruitment, Retention and Reactivation (R3) Efforts of Hunters**

SDGFP encourages R3 efforts of waterfowl hunters in various ways including loaning hunting equipment, aligning state and federal waterfowl hunting regulations, removing unnecessary barriers to participation such as contradicting legal guidelines or inconsistent age definitions, and providing targeted outreach opportunities to diverse audiences. Examples of SDGFP outreach efforts include hosting youth, women, and beginner supported hunting events, encouraging mentorship for novice waterfowl hunters, teaching comprehensive learn-to-hunt classes such as Hunting 101 and Harvest SD, hosting Becoming an Outdoor Women waterfowl hunting events, and providing waterfowl programs for families and students of all ages at the two Outdoor Campuses. In addition to hunter recruitment, it's important to retain the current individuals already participating and to reactivate lapsed goose hunters. The creation of goose decoy loaner trailers and development of the Lower Oahe Waterfowl Hunting Access Area pits have provided free and easily accessible ways for both novice and experienced hunters to enjoy waterfowl hunting without the need to own extensive tracts of property or thousands of dollars' worth of their own goose decoys. Supported hunts offered at this location incorporate experienced and lapsed hunters as mentors, ensuring their continued involvement in waterfowl hunting.

### **Hunter Access**

SDGFP owns approximately 717 Game Production Areas (GPA's) in fee title with over 295,000 acres. The USFWS owns 1,000 Waterfowl Production areas in South Dakota totaling nearly 150,000 acres. Beginning in 2009, SDGFP began a groundbreaking habitat and access program in partnership with USDA, the James River Watershed Conservation Reserve Enhancement

Program (CREP). As of the fall of 2018, over 81,000 acres were enrolled into this highly successful habitat and access program. South Dakota GFP also leases roughly 1.2 million acres as part of its Walk-In Area (WIA) program, many in prime Canada goose hunting areas. SDGFP also currently leases over 31,000 acres of private land in Hughes and Sully Counties as part of the Lower Oahe Waterfowl Access Program. This unique mixture of decoy and pass shooting opportunities provides public access to late season Canada goose hunting on private land adjacent to Lake Oahe.

#### Population and Harvest Monitoring

Population and harvest surveys for South Dakota's giant Canada geese include the USFWS May Waterfowl Breeding Habitat and Population Survey (WBHPS), the USFWS Parts Collection Survey, the federal Hunter Information Program (HIP) survey, as well as SDGFP harvest surveys. SDGFP uses the latest three-year average spring population index to assess the spring population relative to population management range objectives as well as guiding harvest management decisions. Three-year averages are used in lieu of annual index numbers to reduce biases associated with individual yearly survey data such as extreme weather events or observer bias.

#### Goose Banding

Banding migratory waterfowl is an important citizen science-based management tool, aiding in the determination of vital rates needed for management decisions. Harvest rate (recovery rate/reporting rate) analysis indicates harvest rates for banded giant Canada geese in South Dakota ranging from 14%-20% during 2012-2019 hunting seasons. Continued analysis of these band recoveries will aid wildlife managers and help to understand the population dynamics of giant Canada geese in the Central Flyway. This long-term commitment will allow wildlife managers to better monitor vital rates of giant Canada geese into the future.

#### Habitat

SDGFP will support wetland and grassland habitat conservation efforts across South Dakota by providing technical, financial, and delivery support to landowners through various programs and practices designed to meet habitat goals and objectives outlined in the South Dakota State Tactical Plan – a state specific stepped down wetland and grassland habitat conservation plan component of the 2017 Prairie Pothole Joint Venture Implementation plan. SDGFP will also play a critical role in the enhancement, restoration, and protection of wetlands and grasslands through its advocacy efforts and contributions to shaping Farm Bill conservation program opportunities that provide ecosystem services beneficial to South Dakota, the prairie pothole region, and the northern great plains.