

Giant Canada Goose Management in South Dakota

Canada Goose Stakeholder Meeting

September 3, 2015

Rocco Murano, Senior Waterfowl Biologist



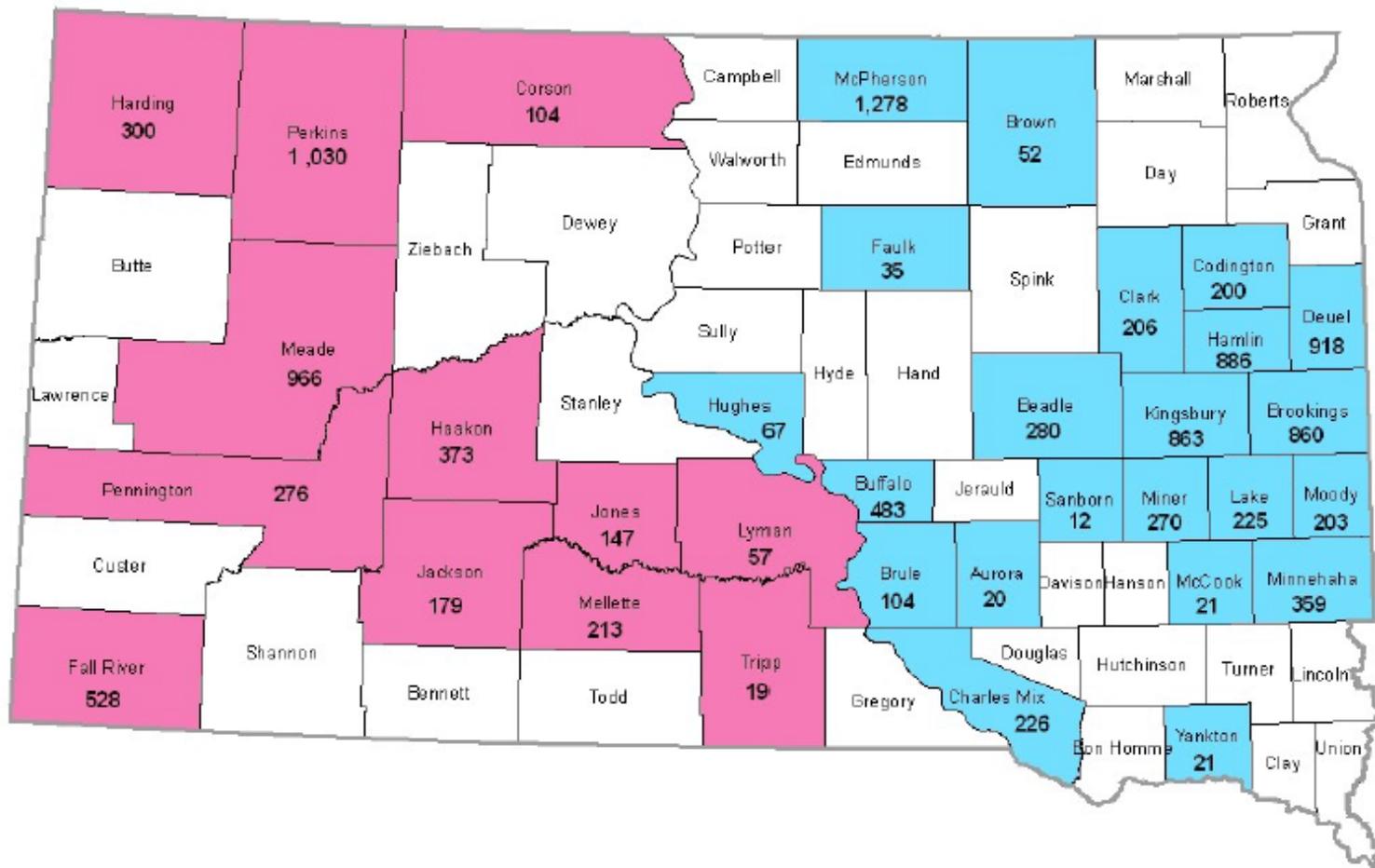
History of Giant Canada Geese in South Dakota

- Historically found across South Dakota where suitable habitat existed.
- Populations fell rapidly with unregulated hunting, egg gathering, market hunting.
- Nearly extirpated by 1900.
- Declared extinct by some authorities in early 1950's.
- Remnant flocks remained at Waubay NWR and Ft. Sisseton.
- Came to be known as the “gold standard” for giant Canada goose propagation and restoration efforts.

Giant Canada Goose Restoration

- Efforts began in 1967 when 32 geese were released on Mellette County stock ponds.
- Focused on release of 7-8 week old goslings into suitable wetland habitats.
- From 1967-1998 4,189 geese were released west river and 8,089 released east river.

Giant Canada Goose Releases by County 1967-1998



Past and Present Giant Canada Goose Season Structure

- 1980's through Mid early 1990's
 - Decoy restrictions in some areas
 - Large areas closed to Canada goose harvest to protect areas under restoration
 - Short seasons
 - Half Day Hunting in large areas of eastern South Dakota
 - Restrictive bag limits

Past and Present Giant Canada Goose Season Structure

- As populations recovered and increased, liberalization of harvest regulations began in the mid 1990's.
- First September Canada goose season held in 1996 for Day, Codrington, Clark, Hamlin, Kingsbury, Deuel, Brookings, Lake, and parts of Miner counties.
- Areas open to September Canada goose hunting increased along with daily bag.

Canada Goose Hunting Units

1975-76

1985-86

GEESE



	Canadas and Whitefronts*	Snows and Blues
OPENS	Oct. 4	Oct. 4
CLOSES	Nov. 30	Dec. 14
SHOOTING HOURS: One-half hour before Sunrise to Sunset**		

*No Canada geese or white-fronted geese may be hunted or killed after October 24 in that portion of Marshall County east and south of a line bounded by the North Dakota border, Marshall County 5, S.D. 10, and S.D. 27 to its junction with Marshall County 15, and south on Marshall County 15 to the Day County line; in that portion of Day County east of Day County 33; in that portion of Clark County east of Clark County 2 and north of S.D. 20; in that portion of Codington County north of U.S. 212; in that portion of Grant County north of S.D. 20, west of U.S. 77 and south of U.S. 12; and in that portion of Roberts County south of S.D. 10 and west of U.S. 81. Provided further that from October 4 through October 24, it is unlawful to use Canada or white-fronted goose-type decoys in the above described areas.

**The closing hour is 12 Noon from October 4 through October 31 in Brookings, Clark, Codington, Day, Deuel, Grant, Hamlin, Kingsbury, Marshall, Roberts, Hutchinson and McCook counties.

CLOSED

Except for special Bennett County goose hunting season, the goose season is closed in the counties of Harding, Perkins, that portion of Meade north of the Belle Fourche River, that portion of Pennington east of the Cheyenne River, Haakon, Jackson, Jones, Shannon, Washabaugh, Mellette, Bennett, Todd, that portion of Corson west of S.D. 65, and that portion of Ziebach north of S.D. 20.

SPECIAL BENNETT COUNTY SEASON

200 special permits will be issued for goose hunting in Bennett County for a season from October 25 through November 16. The permit allows the hunter to take and possess one Canada goose only. Applications will be accepted by the Licensing Office, Department of Game, Fish and Parks, Pierre, South Dakota 57501 through September 19 with a lottery held on September 22.

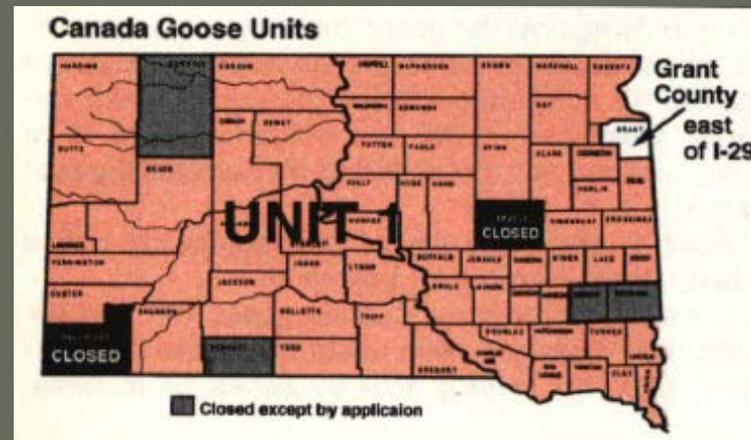
DAILY BAG AND POSSESSION LIMITS

The daily bag limit is five geese, to include not more than one Canada goose and one white-fronted goose.

The possession limit is five geese, to include no more than two Canada geese or two white-fronted geese, or one of each.

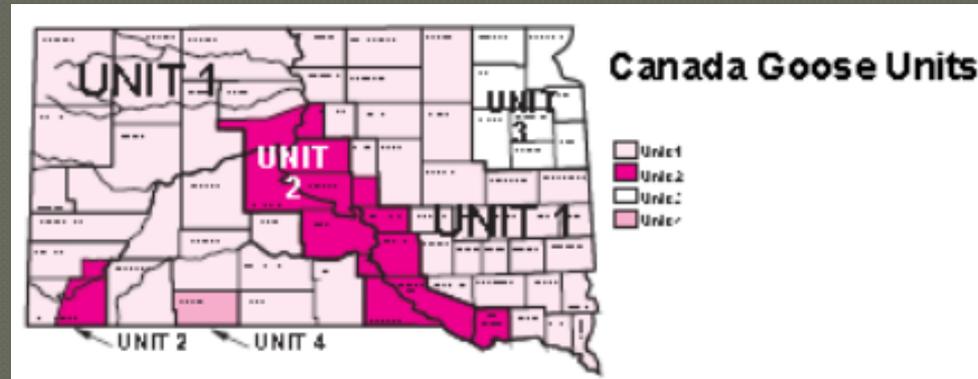


1995-96

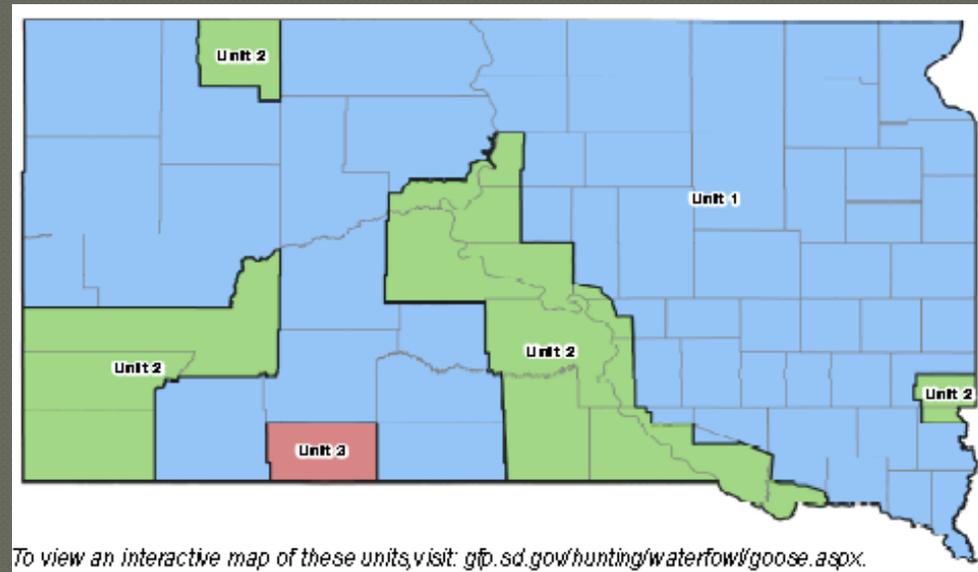


Canada Goose Hunting Units

2005-06



2015-16



To view an interactive map of these units, visit: gfp.sd.gov/hunting/waterfowl/goose.aspx.

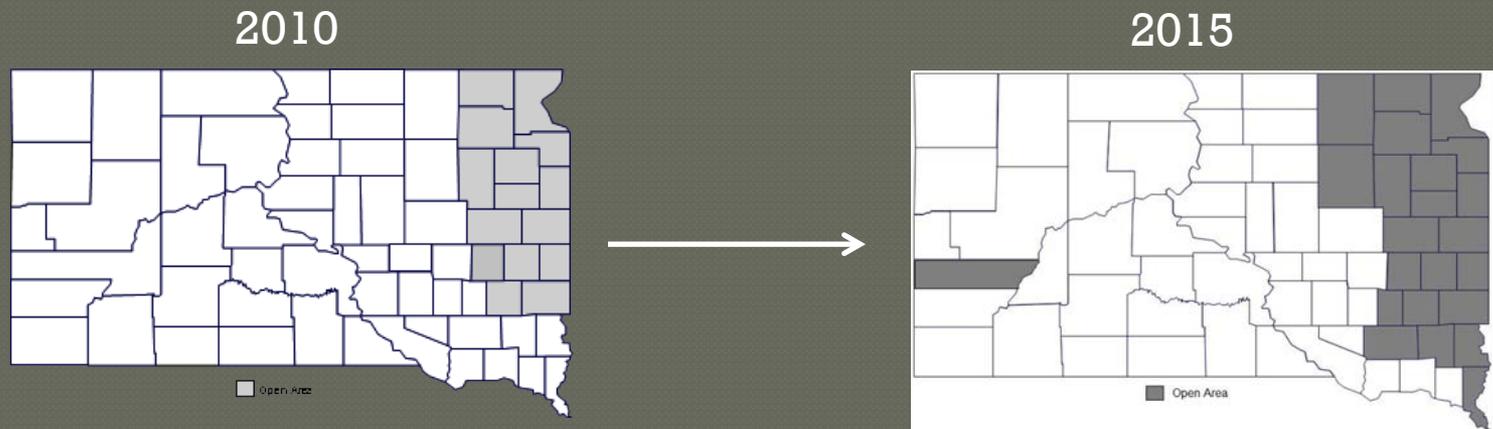
Past and Present Giant Canada Goose Season Structure

○ Early Fall Canada Goose Season

Year	# Hunters	Daily Limit	# Counties Open	Harvest
1996	6,586	1 & 2	10	12,866
1997	6,506	2	13	11,281
1998	6,682	4	13	15,768
1999	9,173	5	14	25,960
2000	10,142	5	20	37,365
2001	8,358	5	27	51,491
2002	9,459	5	27	34,831
2003	10,152	5	27	42,417
2004	7,662	5	27	26,113
2005	5,686	5	28	21,499
2006	6,095	5	28	25,755
2007	5,876	5	56	26,698
2008	5,275	5	55	27,924
2009	6,157	5	55	39,275
2010	5,767	8	55	44,183
2011	5,417	8	55	50,361
2012	3,636	15	55	28,788
2013	4,528	15	54	29,887
2014	5,106	15	54	28,814

August Management Take

- Initiated in 2010 in an attempt to alleviate local depredation issues and reduce giant Canada goose populations.
- Outside the federal goose framework



August Management Take

Year	# Hunters	Daily Limit	# Counties Open	Harvest
2010	3,538	8	15	29,047
2011	3,211	8	17	30,300
2012	3,636	15	22	36,757
2013	2,345	15	23	18,592
2014	2,302	15	23	20,671

Giant Canada Goose Management

- By 1999, most of South Dakota was under the full 95 day federal framework for dark goose hunting.
- In 2007 frameworks were extended to the maximum allowed under the Migratory Bird Treaty Act (107 days)
- Long seasons and liberal bag limits have been utilized in an attempt to control this population.

Giant Canada Goose Management

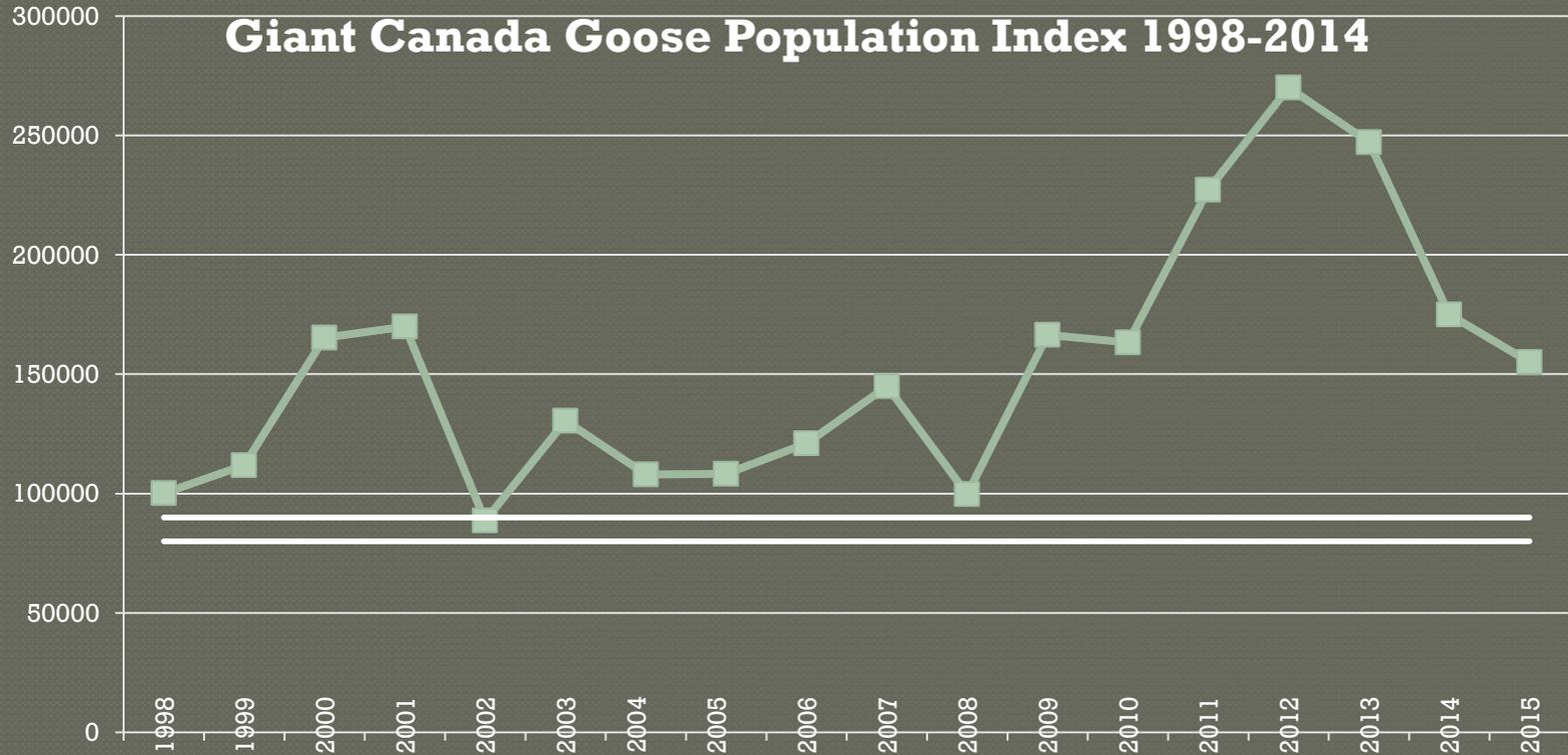
- First Management Plan Completed in 1998 with a population objective of 50,000 breeding birds (three year average) according to the USFWS May breeding waterfowl survey.
- Plan was updated in 2005, 2010 with a current population objective of 80,000-90,000 breeding birds (three year average).
- Plan is scheduled to be updated this year.

Management Decision Matrix

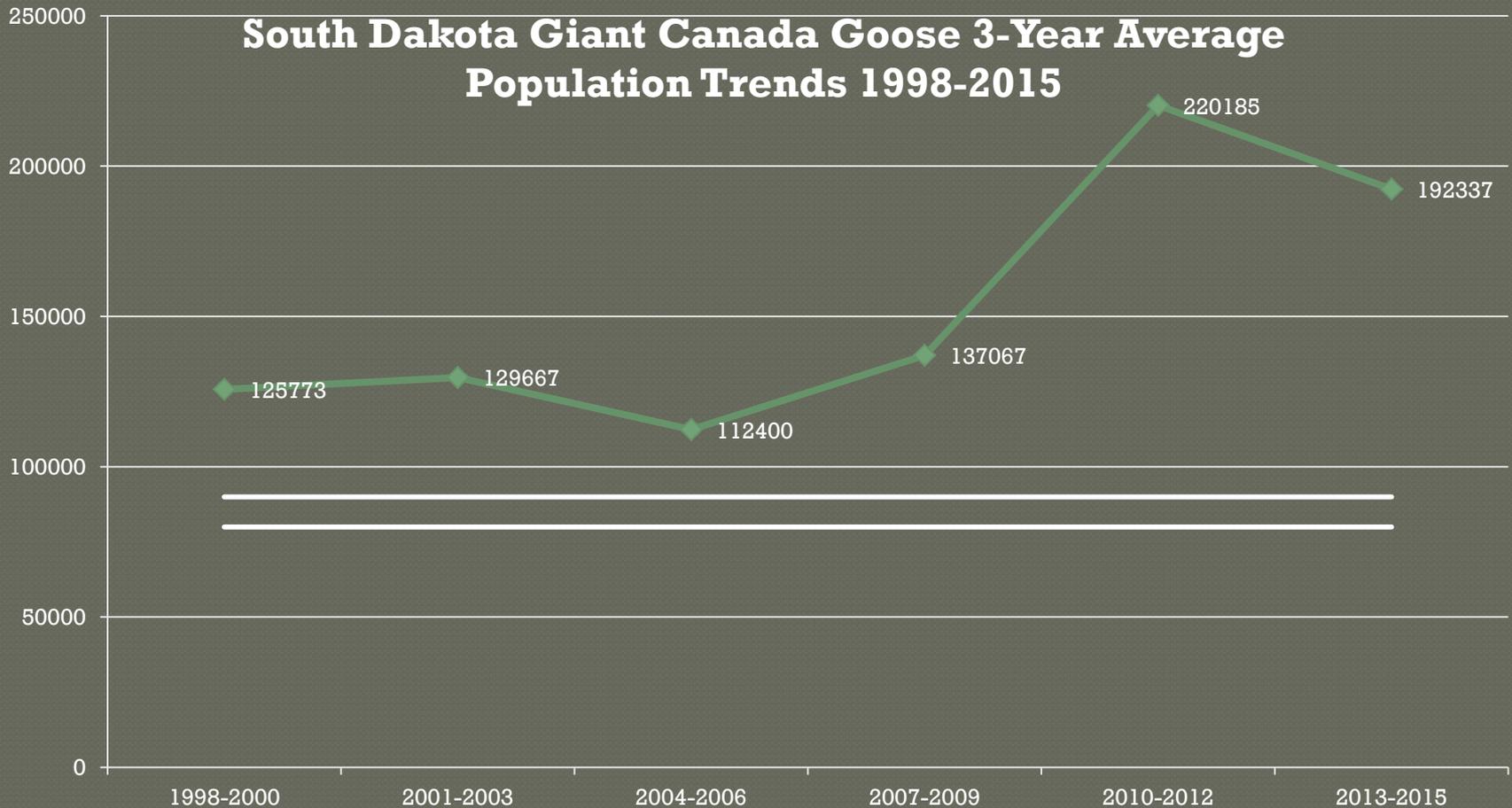
- The intersection of management tools and population goals.
- Helps in the development of season and regulation recommendations.

	<u>RESTRICTIVE</u>	<u>MODERATE</u>	<u>LIBERAL</u>
<u>"TOOLS"</u>	Increase Popn Objective	Maintain Popn Objective	Decrease Popn Objective
3 year BPOP Index	Below Objective	Objective Range	Above Objective
Full Federal Framework	Yes	Yes	Yes
August Management Take	Restrict Counties	Consider County Restrictions	Yes
Daily Bag	Restrict	Consider Restriction	Full Framework Bag
SAH Donations	No	Yes	Yes

SD Giant Canada Goose Population Trends



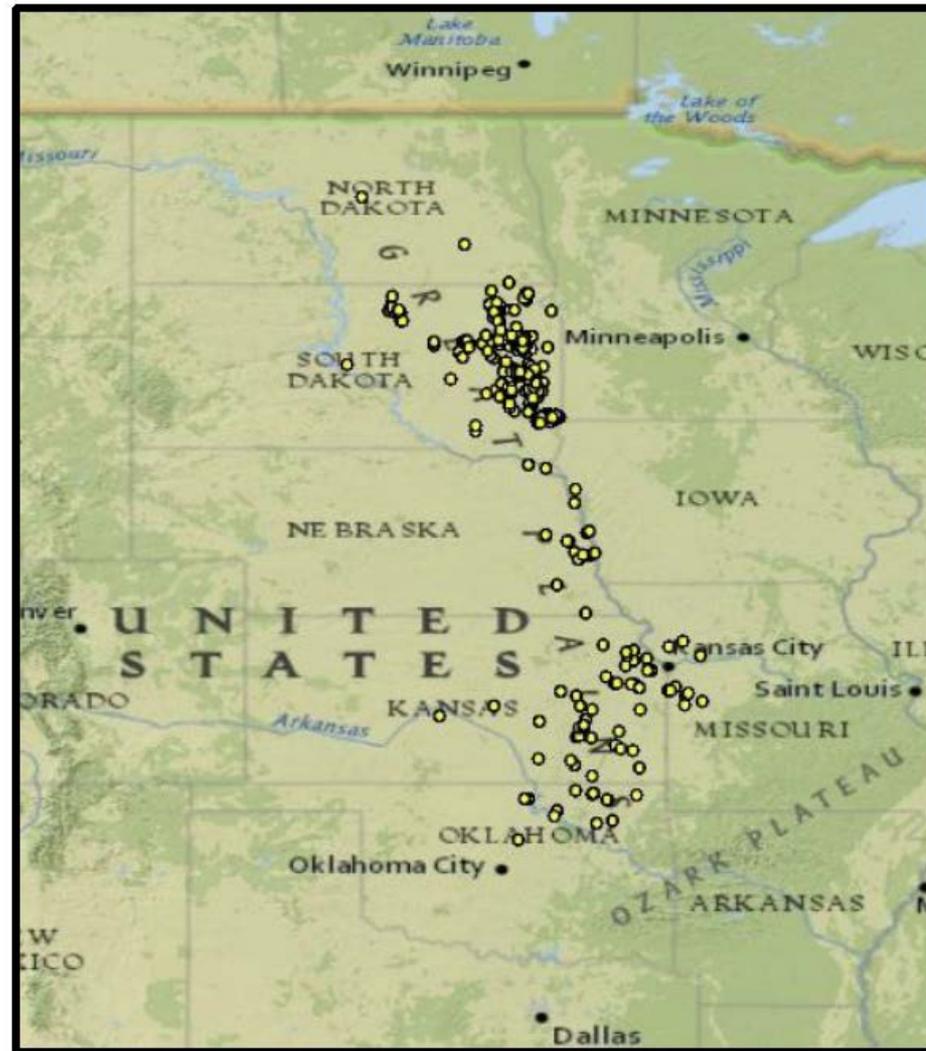
3 Year Average Population Trends



Canada Goose Banding

- **Central Flyway Canada goose banding program**
- Banding migratory waterfowl is an important management tool, aiding in the determination of vital rates needed for management decisions. Beginning in 2012, South Dakota along with other participating states in the Central flyway initiated a four year cooperative banding program with the following objectives:
 - Determine timing, distribution, and derivation of harvest
 - Calculate survival rates
 - Calculate harvest rates
 - Use a Lincoln estimator to calculate indirect population estimates and associated growth rates
 - Determine future banding needs
- South Dakota has been a strong contributor to this program, banding over 8,000 Canada geese since 2012. Once completed, analysis of band recoveries will greatly aid managers understand the population dynamics of Central Flyway giant Canada geese.

2014 Direct Recoveries



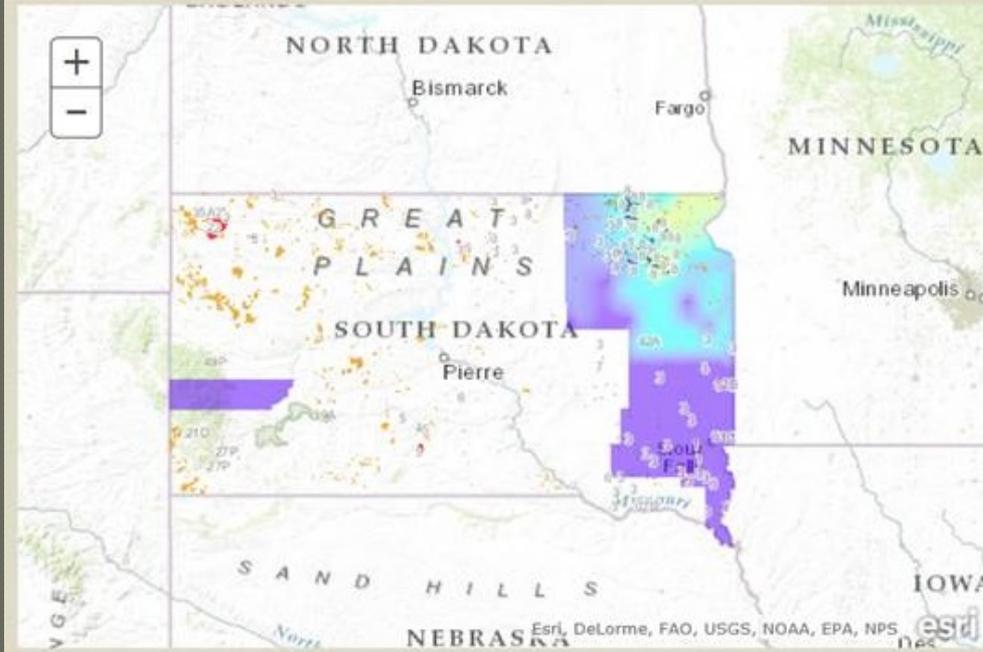
Waterfowl Migration & Hunting Opportunity Thunderstorm Maps

WATERFOWL POPULATION INDEX - HUNTING OPPORTUNITY THUNDERSTORM MAP

GFP field staff create the maps below by rating areas of each county on a scale of 1-10 regarding the current quality of waterfowling opportunity.

These maps are updated on a weekly basis and should provide a good indicator of the duck and goose activity. Rankings are based on daily observations of field staff and the availability of access and public land.

AUGUST MANAGEMENT TAKE



South Dakota Canada Goose Research

Completed Research

- Band Recovery Data Analysis, Jeff Gleason, MS, 1997
Dr. Jonathan Jenks, Principal Investigator
- Canada Goose Movement Study, Bobby Anderson, PhD, 2005
Dr. Charles Dieter, Principal Investigator
- Crop Damage by giant Canada Geese in eastern South Dakota, Troy Radtke, MS, 2008
Dr. Charles Dieter, Principal Investigator
- Evaluation of various foliar sprays for use as a Canada goose grazing deterrent, Cody Warner, MS, 2013
Dr. Charles Dieter, Principal Investigator

Current Research

- Evaluation of Anthraquinone as a deterrent to Canada goose damage on soybeans with possible application to other crops, Matt Gottlob, MS.
Dr. Charles Dieter and Dr. Joshua Stafford, Principal Investigators

Questions????

