

BIRDS

Status: Introduced Statewide

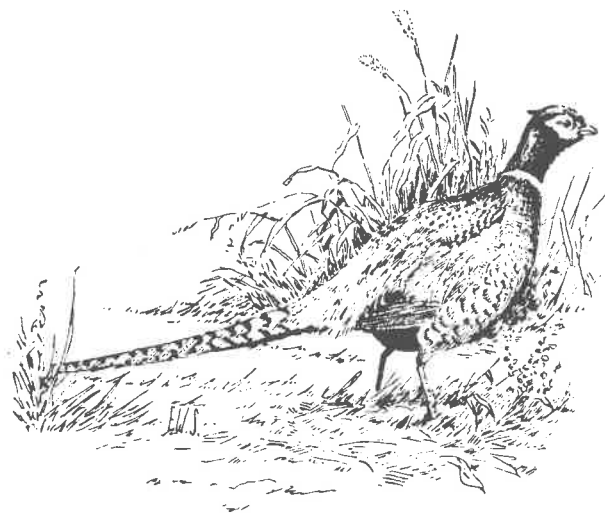
RING-NECKED PHEASANT

(Phasianus colchicus)

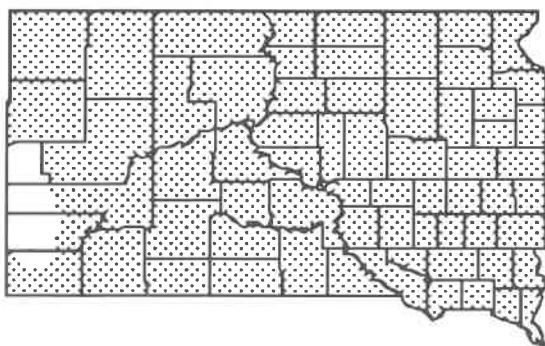
State Bird of South Dakota

Description

Ring-necked pheasants are chicken-like in size and shape. The male ring-necked pheasant is a spectacular looking bird. He has a shiny green head with short "horns" of feathers, a naked red face, a white ring around his neck, and a shiny copper-colored breast. The female is less flashy. She is mottled brown and black and is smaller than the male. A male ring-necked pheasant is approximately 34 inches (96.4 cm) long with a 20 to 21 inch (51 - 53 cm) tail and weighs 2.25 to 2.5 pounds (1 - 1.1 kg). The female is only 25 inches (63.5 cm) long with a 11 to 12 inch (27.9 - 30.1 cm) tail and weighs 1.75 to 2.00 pounds (0.8 - 0.9 kg).



Distribution



The ring-necked pheasant can be found throughout most of South Dakota, except for the Black Hills. This bird, however, was originally from China. The first successful introduction of the pheasant into the United States occurred in Oregon in 1892. Many attempts were made to introduce the bird into South Dakota, but the first successful introduction occurred in Spink County in 1908. A.E. Cooper and E.L. Ebbert, adjoining farmers south of Doland, released the pheasants into the wild. In 1911, the South Dakota

Department of Game, Fish and Parks released approximately 250 pairs in Spink and Beadle counties. Since that time, the South Dakota pheasant population has fluctuated from a high of 16 million birds to a low of 1.4 million birds. In 1993, the pheasant population was estimated to be around 5 million birds. Table 1 includes data on South Dakota pheasant populations and hunting records from 1941 through 1994. The highest population density of pheasants used to occur in east-central South Dakota, but currently the greatest numbers of birds are found in the south-central part of the state.

Natural History

Pheasants are *polygamous*. The males start claiming territories in March. They mark their territory by crowing at the boundaries. The male tries to attract females to his territory. In April, the male mates with several females. Each female will then look for a nesting site and begin to lay eggs. She nests on the ground, using leaves, grass, and breast feathers as lining for the nest. She will lay from 10 to 12 eggs, one each day. When the last egg has been laid, she will start incubating them.

Many *predators*, such as cats, dogs, skunks, raccoons, weasels, mink, fox, hawks, owls and coyotes, threaten nesting hens and their eggs. However, the hens are very good at hiding in the grass. If a nest is destroyed, the hen will re-nest. Her eggs will hatch after 21 to 24 days of incubation. She will only raise one brood of young per year.

Pheasants have *precocial* young. The *precocial* chicks are downy and are able to walk as soon as they are dry. The young develop quickly. Because they need a high protein diet to aid their rapid growth, young pheasants eat a lot of insects, comprising up to 90 percent of their diet. They are able to make short flights at 2 weeks of age, and reach adult size by October or November.

Prime pheasant habitat occurs in areas with a mixture of grain fields, grasslands, and woodlands or thickets. In these areas, they can attain the four basic needs of wildlife; food, water, shelter, and space.

Adult pheasants feed on a variety of seeds, insects, and berries. The majority of their diet consists of grains, such as corn, wheat, oats, barley, and buckwheat, that have fallen to the ground. Large numbers of pheasants can be found in areas where greater than 50 percent of the land is under cultivation. Pheasants get the water they need from seeds, berries, dew, and rainwater pools. The reason pheasants are so often seen along roadsides is that they, like many other seed-eating birds, eat gravel. These small stones accumulate in the bird's gizzard and serve as an aid in breaking up hard foods, such as seeds.

Cover is especially important for pheasants. They need protection from the cold and snow during the long winters. Woodlands or thickets serve as protection from the cold winds and snow. Wetland vegetation also can provide cover during the winter. These hiding places are equally important to the birds as safe havens from *predators*. Grassland cover is needed for the nesting hens during the spring.

Significance

In 1943, the ring-necked pheasant was named South Dakota's state bird. Population numbers reported each year show that South Dakota usually has the largest population of pheasants in the United States. The pheasant has been economically important to the state of South Dakota. Pheasant hunting brings in millions of dollars in revenue each year. The amount of money brought in fluctuates with pheasant population numbers.

TABLE 1

Summary of South Dakota Pheasant Seasons and Harvest Statistics

Year	Season Length ^A			Daily Limit ^B		Number of Licensees Who Hunted			Calculated Statewide Harvest ^C	Pre-hunt Pheasant Population ^D	Post-hunt Sex Ratio (Cocks/100 Hens) ^E
	Days	Begin	End	Cocks	Hens	Resident	Non-resident	Total			
1941	50	10/01	- 11/19	5	1	83,000		94,000	3,125,000		
1942	90	09/26	- 12/24	7	2	80,000	16,000	96,000	4,500,000		
1943	157	09/25	- 02/28	7	3	60,000	18,000	78,000	3,168,000		
1944	162	09/20	- 02/28	10	5	77,000	42,000	119,000	6,439,000		
1945	153	09/29	- 02/28	8	3	88,000	87,000	175,000	7,507,000	16,000,000 ^F	
1946	137	10/15	- 02/28	5	1	103,000	84,000	187,000	3,550,000	11,000,000 ^F	
1947	45	10/11	- 11/24	3	0	103,000	13,000	116,000	1,496,000	7,000,000	60
1948 ^G	45	10/09	- 11/22	4	0	123,000	26,000	149,000	2,148,000	9,600,000	53
1949	45	10/15	- 11/28	4	0	121,000	22,000	143,000	1,864,000	8,100,000	45
1950	10	11/04	- 11/13	2	0	88,000	2,000	90,000	507,000	3,200,000	63
1951	25	10/20	- 11/13	3	0	95,000	10,000	105,000	1,184,000	6,000,000	55
1952	30	10/18	- 11/16	3	0	107,000	13,000	120,000	1,490,000	6,100,000	43
1953	30	10/17	- 11/15	3	0	100,000	17,000	117,000	1,210,000	4,900,000	41
1954	30	10/23	- 11/21	3	0	105,000	17,000	122,000	1,672,000	6,200,000	37
1955	40	10/22	- 11/30	3	0	111,000	19,000	130,000	1,608,000	6,300,000	39
1956	35	10/27	- 11/30	3	0	102,000	20,000	122,000	1,221,000	4,300,000	34
1957	37	10/26	- 12/01	3	0	102,000	20,000	122,000	1,339,000	5,900,000	43
1958	51	10/18	- 12/07	4	0	125,000	36,000	161,000	2,635,000	11,100,000	40
1959	58	10/17	- 12/13	5	0	117,000	45,000	162,000	2,212,000	7,500,000	22
1960	42	10/22	- 12/02	4	0	130,000	28,000	158,000	2,574,000	9,500,000	28
1961	58	10/21	- 12/17	4	0	141,000	51,000	192,000	3,247,000	11,000,000	26
1962	61	10/20	- 12/19	4	0	138,000	57,000	195,000	2,790,000	10,200,000	44
1963	74	10/19	- 12/31	4	0	144,000	68,000	212,000	3,095,000	10,000,000	23
1964	60	10/17	- 12/15	3	0	124,000	23,000	147,000	1,474,000	5,100,000	24
1965	44	10/16	- 11/28	3	0	102,000	14,000	116,000	797,000	3,300,000	37
1966	16	10/15	- 10/30	3	0	82,000	6,000	88,000	409,000	2,200,000	56
1967	37	10/21	- 11/26	3	0	111,000	15,000	126,000	908,000	2,900,000	39
1968	37	10/19	- 11/24	3	0	117,000	19,000	136,000	880,000	3,300,000	37
1969	30	10/18	- 11/16	3	0	96,000	14,000	110,000	622,000	2,700,000	48
1970	37	10/17	- 11/22	3	0	108,000	18,000	126,000	901,000	3,500,000	40
1971	42	10/16	- 11/26	3	0	117,000	25,000	142,000	1,106,000	3,700,000	32
1972	49	10/21	- 11/24 ^H	3	0	120,000	28,000	148,000	1,201,000	4,100,000	39
1973	64	10/20	- 11/23 ^I	3	0	127,000	37,000	164,000	1,283,000	4,200,000	29
1974	49	10/19	- 11/22 ^J	3	0	126,000	25,000	151,000	1,071,000	3,000,000	25
1975	23	10/18	- 11/09	2	0	100,000	12,000	112,000	497,500	2,100,000	42
1976	30	10/16	- 11/14	2	0	89,000	8,000	97,000	372,500	1,400,000	35
1977	44	10/15	- 11/27	2	0	90,000	10,000	100,000	518,600	2,200,000	43
1978	44	10/21	- 12/03	2	0	82,000	13,000	95,000	558,300	2,000,000	38
1979	51	10/20	- 12/09	3	0	105,000	18,700	123,700	934,000	3,400,000	39
1980	53	10/18	- 12/04 ^K	3	0	107,500	28,500	136,000	1,158,700	4,000,000	21
1981	51	10/17	- 12/06	3	0	106,300	33,000	139,300	1,299,100	4,000,000	21
1982	51	10/16	- 12/05	3	0	95,300	31,800	127,100	1,070,500	3,900,000	34
1983	51	10/15	- 12/04	3	0	102,300	36,400	138,700	1,416,600	4,400,000	21
1984	51	10/20	- 12/09	3	0	91,290	35,170	126,460	962,700	3,000,000	28
1985	51	10/19	- 12/08	3	0	85,500	34,700	120,200	801,700	2,900,000	31
1986	51	10/18	- 12/07	3	0	70,850	24,000	94,850	627,300	1,800,000	34
1987	51	10/18	- 12/07	3	0	83,000	31,900	114,900	929,700	3,400,000	34
1988	51	10/15	- 12/04	3	0	79,800	30,000	109,800	782,700	2,800,000	29
1989	51	10/21	- 12/10	3	0	71,700	26,100	97,800	687,000	2,400,000	27
1990	51	10/20	- 12/09	3	0	71,300	26,501	97,801	777,300	3,200,000	38
1991	65	10/19	- 12/22	3	0	91,200	32,127	123,327	1,222,600	4,500,000	31
1992 ^L	65	10/17	- 12/20	3	0	83,400	42,900	126,300	969,000	3,800,000	35
1993	65	10/16	- 12/19	3	0	78,900	45,500	124,400	1,213,800	5,000,000	36
1994	65	10/15	- 12/18	3	0	78,800	65,200	144,000	1,370,600	4,900,000	29

A. For the State's main pheasant range; more restrictive in some areas, particularly west of the Missouri River.

B. Maximum in the main pheasant range.

C. Calculated from Game Harvest Questionnaire results.

D. Calculated with Dahlgren's P1 Formula.

E. Calculated From winter sex ratio counts.

F. Estimated.

G. Non-residents prohibited from hunting during the first ten days of the 1948 season.

H. Also Dec. 14-27 in 1972.

I. Also Dec. 3-31 in 1973.

J. Also Dec. 2-15 in 1974.

K. Also Dec. 27-31 in 1980.

L. Actual nonresident harvest values from hunter survey utilized, not estimates.

Management Considerations

The best way to increase pheasant numbers is to provide better habitat. While pheasants are hardy birds, they experience a high turnover each year. Approximately 65% to 75% of the pheasant population die each winter. The most vulnerable birds are the young of the year.

More pheasants will survive the winter if plenty of food and cover is available. Intensive farming practices are hard on pheasants. Not only is less waste grain available for food, but pesticides and

chemical fertilizers can have ill effects. Pesticides destroy weedy and woody cover needed for protection and destroy insects needed by the young for rapid development. Chemical fertilizers can cause nitrate poisoning in pheasants.

Wildlife managers, besides providing habitat, manage pheasant populations by keeping records of pheasant densities, productivity, and mortality. They establish population numbers using pheasant and hunter surveys. One survey they do is "cock crowing counts." These counts are done during the spring when the cocks are busy marking their territory.

Glossary

Polygamous - situation in which a male mates with more than one female.

Precocial - young that are covered with feathers and are capable of moving around immediately after hatching.

Predator - an animal that kills and consumes other animals for food.

References

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Selected Resources for Teachers

The Pheasant, a book by Virginia C. Holmgren, 1983. Crestwood House, Mankato, MN.

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