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## **\*\*SURVIVAL AND REPRODUCTION OF WILD TURKEYS IN THE NORTHERN BLACK HILLS OF SOUTH DAKOTA**

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In South Dakota, wild turkeys are a high-interest species for both consumptive and non-consumptive uses. Harvest records indicate that the population segment residing in the northern Black Hills may be declining. Although data on hen survival, nesting survival, and early poult survival were collected for the southern Black Hills in the early 2000s, there is currently a paucity of demographic data for the northern Black Hills. We seek to inform wild turkey management by characterizing demography specifically for the northern Black Hills. We radio-tracked 80 turkey hens (40 adults/40 juveniles) in 2016 to estimate rates of hen survival, nesting, nesting success, and early poult survival; this two-year study will continue in 2017. Based on preliminary data, rates of nesting by adult hens are lower in the northern Black Hills than the southern Black Hills (77.5% vs. 98%), as are rates of reneating by adult hens (33% vs. 75%). We are in the process of estimating hen survival, but preliminary results indicate that annual survival is approximately 50%. Poult survival to 4 weeks is comparable in the northern and southern Black Hills, but lower than in other portions of the range of Merriam's wild turkey. Although the northern and southern Black Hills are in close

proximity, the substantial climatic differences likely explain the reduced productivity of the turkey population in the northern Black Hills. Limiting fall harvest of wild turkey hens in the northern Black Hills may be required to sustainably manage this important game species.