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DESCRIPTIVE CHARACTERISTICS OF A RED-BELLIED SNAKE POPULATION AT OAK LAKE FIELD STATION

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ABSTRACT

Habitat use and population biology of the northern red-bellied snake (Storeria occipitomaculata occipitomaculata) were studied at Oak Lake Field Station (2003-2004) to enhance existing knowledge and future management efforts in eastern South Dakota. The red-bellied snake is listed as a monitored species in South Dakota, species of special concern in Nebraska and protected in Iowa. Forty-three snakes were caught by hand and from drift fences from May-August 2003. Thirty-two additional snakes were caught by hand or were birthed from May-September 2004. Nearly twice as many females (69%) as males (31%) were collected. Snout-vent length ranged from 27 to 245 mm (mean=157 mm) and body mass from 0.3 -11g (mean =3.9 g). Snake body temperatures ranged from 21.2°C -29.2°C (mean=25.4°C). Forty-three percent of captured snakes were found on northerly aspects. Over half (53%) were captured on unpaved roads consisting of 90% or greater sand and gravel. Capture sites within vegetation were dominated by grasses and forbs. Six snakes were collected in haystacks, one within a thatch ant mound and one in ash immediately following a prescribed burn. No snakes were found between 1200 hrs-1600 hrs throughout both summers and most (86.6%) were collected late in the growing season. Two gravid females gave birth in captivity within three to five days of capture. Young body mass ranged from 0.29g-0.32g (mean=0.30 g). Four of the fifteen young were born dead. All live young were fully developed and were active within minutes of birth.