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Wood Frogs (*Rana sylvatica*) in Southwestern Roberts County and Western Grant County, South Dakota

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NOTES

WOOD FROGS (*RANA SYLVATICA*) IN SOUTHWESTERN ROBERTS COUNTY AND WESTERN GRANT COUNTY, SOUTH DAKOTA —

Historically, only six records of Wood Frogs (*Rana sylvatica*) existed from South Dakota, all represented by museum specimens. A single specimen was collected from Hartford Beach on Big Stone Lake, Roberts County in 1922 (National Museum of Natural History, Smithsonian Institution [USNM] 65452) and five Wood Frogs were collected near the outlet of Blue Dog Lake, Day County in 1929 (USNM 312618–312622; Fig. 1). After the 1920s, no other Wood Frogs were reported in South Dakota for the next six decades, and the species was presumed extirpated. Over (1923, 1943) reported the species was common in the wooded coulees located along the escarpment of the Prairie Coteau in western Roberts County, South Dakota. Later, Fishbeck and Underhill (1960) reported that Wood Frogs no longer occurred in these areas and surmised that droughts and over-harvesting of timber in the coulees had led to the species' extirpation. Unfortunately, no author was specific about the locations or names of the coulees. However in 1997, Wood Frog calls were recorded at two sites in northeastern Roberts County (Fisher 1998, Naugle et al. 2005), the first record of the species in South Dakota since 1929. Since 1997, numerous individuals have continued to document Wood Frogs in northeastern Roberts County (Backlund 2005; James Ford Bell Museum of Natural History, University of Minnesota [JFBM] 14426; Biodiversity Collections, University of Texas at Austin [TNHC] 108910–108914, 108916–108918).

It was not until 2016 that Wood Frogs were detected outside of northeastern Roberts County (Fig. 1). On 3 May 2016, a single juvenile Wood Frog was collected along Owens Creek, Ortley Game Production Area, southwestern Roberts County, South Dakota (45.34936°N, 97.20640°W; WGS 84; TNHC 108915). On 18 April 2019, co-author Dennis R. Skadsen (DRS) was notified that several male Wood Frogs were calling at 2330 h CST at Ortley Game Production Area. DRS visited the site on 23 April 2019 and recorded Wood Frogs calling from 2030 to 2130 h CST. Wood Frogs were in a large, rich fen wetland (45.34695°N, 97.21637°W; WGS 84) ca. 1.2 km west of 450th Ave, which runs parallel to the east boundary of Ortley Game Production Area. Prior to this, DRS had visited this site on several occasions from late March to April during 2017 and 2018 to listen for calling males during their breeding season, but no Wood Frogs were heard or observed. This population of Wood Frogs is ca. 48 km southwest of the Wood Frog records in northeastern Roberts County and 10 km east of historic specimens collected at Blue Dog Lake, Day County. Until these recent

records, there had been no other reports of Wood Frogs from the Prairie Coteau or southwestern Roberts County.

Additional records of Wood Frogs from the Prairie Coteau were collected in 2019. On 9 August 2019, a Wood Frog was collected near Pearson Slough in southwestern Roberts County (45.30346°N, 97.16389°W; WGS 84; TNHC 114350). On 26 April 2019, Wood Frogs were heard calling from a wetland near the headwaters of the Big Sioux River in northwestern Grant County, South Dakota (45.28489°N, 97.16194°W; WGS 84), and on 2 May 2019, Wood Frogs were recorded calling near Meyer-Janssen Waterfowl Production Area, Grant County (45.17600°N, 96.92900°W; WGS 84; HerpMapper.org [HM] 283333 and TNHC 114348). These two records represent a range expansion farther south in South Dakota and are the first records of Wood Frogs in Grant County, South Dakota (Ballinger et al. 2000).

It remains unclear why Wood Frogs have only been recently detected in southwestern Roberts County and Grant County. Given the proximity to historic records from Blue Dog Lake, small numbers of Wood Frogs might have been present in southwestern Roberts County since the 1920s with an increased abundance during the last few years. Drainages and tributaries in this region, such as Owens Creek, may have facilitated movement of Wood Frogs throughout the area. Despite numerous amphibian and reptile surveys at wetland and coulee habitats across Roberts County, no Wood Frog populations have been detected between these two broadly separated regions. Further, given the proximity to recent records, surveys for Wood Frogs should target suitable habitat in Codington and Day counties in an attempt to better understand the distribution of this species in South Dakota.

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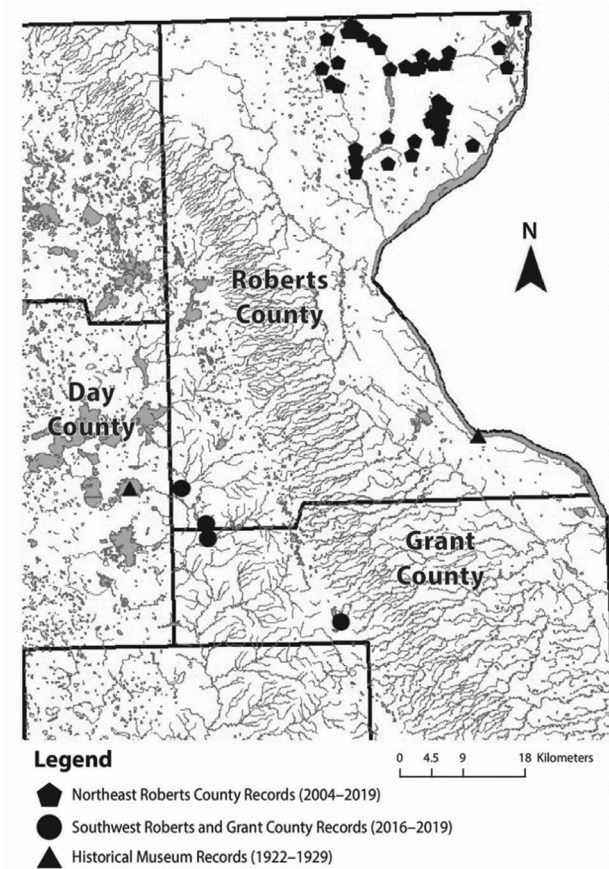


Figure 1. Current and historic Wood Frog (*Rana sylvatica*) reports and voucher records in northeastern South Dakota. The majority of recent records are restricted to northeastern Roberts County; however, recent specimens have been detected in southwestern Roberts County and western Grant County (2016–2019).

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