

NOTE ON DECEMBER BREEDING BY THE EASTERN WOODRAT (*NEOTOMA FLORIDANA*)

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Abstract: *Collecting mammals in Collin County, Texas a pregnant Neotoma floridana was trapped on 20 January 2018. Examining the three fetuses it was determined that the size of the embryos indicated that the eastern woodrat had bred in December 2017. This record indicates that the breeding season for N. floridana in North Texas starts in December.*

Key words: *Neotoma floridana, eastern woodrat, breeding season, Texas*

The breeding season of the eastern woodrat, *Neotoma floridana* varies across the distribution of this species. For instance, eastern woodrats from Oklahoma breed from March through October (Goertz, 1970); whereas (Rainey, 1956) reported that the breeding season extends from February through August for populations in Kansas. In Texas, the breeding season of *N. floridana* occurs from January to September (Schmidly and Bradley, 2016). Typically, the gestation period for *N. floridana* has been reported to range from 33 to 35 days (Wiley, 1980).

On 20 January 2018, while collecting mammals 3.21 mi N. Celina (33° 22.224" N; 96° 46.719" W) Collin Co., Texas using a combination of folding Sherman trap and Victor snap rat traps set around a large brush and trash pile, an eastern woodrat (RMP 15,247) was trapped with a Victor snap trap baited with peanut butter. (Schmidly and Bradley, 2016) reported the distribution of *N. floridana* as the eastern one third of Texas. This site is well inside known range in north Texas. The eastern woodrat contained three fetuses with crown-rump lengths of 98 mm, 96 mm, and 95 mm respectively. Using the birth measurement, it is estimated that the fetuses were approximately 30 days old, which would indicate that in north Texas the breeding season starts in December. The estimate is based on measurements of pups conducted in a previous study of 21 *N. floridana* pups taken a few hours after birth were 87 mm. to 96 mm. (Hamilton, 1953). (Schwartz and Schwartz, 2001) reported birth measurements as 89.4 to 101.6 mm.

The period of reproduction of other species of *Neotoma* in Texas has been described as follows: the breeding season of *N. leucodon* may extend throughout the year in parts of Texas, but the primary season is from January to September; *N. mexicana* breeds from early spring through summer; and *N. micropus* breeds throughout the year (Schmidly and Bradley, 2016).

This record extends the breeding season for *N. floridana* in Texas from December to September.

Research was conducted under Texas Parks and Wildlife Permit number SPR-1106-785. The specimen is housed in the Texas Tech University Museum, Mammal Collection accession number (TK 200,363) as a skin, skeleton and tissue samples. Other mammals captured were *Peromyscus leucopus* and *P. maniculatus*. We would like the two anonymous reviewers for their helpful comments, which improved the manuscript.

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