ADDITIONAL FIELD LONGEVITY RECORD FOR THE ALLEGHENY WOODRAT (NEOTOMA MAGISTER) -- Previously, I reported two field records for longevity in wild Allegheny woodrats (Mengak 1997). One male lived a minimum of 45 months between first and last captures and a female lived a minimum of 49 months between first and last captures.

As part of a continuing long-term monitoring study, live trapping has been conducted at regular intervals at several sites in Virginia from 1990 to 2000. During this study an additional woodrat has been tagged and followed through time that now extends the previously known field longevity record for this species. Individual woodrats are live trapped in Tomahawk collapsible traps baited with one-half apple during two consecutive nights on a bi-monthly schedule, weather permitting. Captured individuals are ear-tagged for permanent identification, sexed, weighed, examined for general body condition and reproduction status, and released at the capture site.

On 14 October 1995, I caught a 230-g subadult female woodrat at my study site in Giles County, Virginia. This site consists of a cliff and associated boulders, talus and rock outcrops. There are numerous crevices, cracks, overhangs and small caves. Dominant overstory vegetation includes oak (Quercus spp.), hickory (Carya spp.), maple (Acer spp.), and birch (Betula spp.). Understory vegetation includes blueberry (Vaccinium spp.), seedlings of overstory trees, and greenbrier (Smilax spp.). Assuming a weight gain of 1.0 g per day in wild woodrats (Mengak, unpubl. data) the individual was born about April 1, 1995. She was captured an additional nine times at the Giles County site.

On 6 April 1997 she was captured and found to be hypothermic and lethargic in the trap. She could not be warmed in the field and was returned to a holding facility at Ferrum College. While in the holding facility, she was feed commercial lab chow, apples and water ad libitum. I do not have a long-term animal holding facility. Further, I was scheduled to sample at a different long-term monitoring site in May. Therefore, on 17 May 1997, she was returned to the long-term study site in Bath County, Virginia. This site is approximately 125 km NE of the Giles County capture site. She was subsequently captured 16 times at the Bath County site. Interestingly, she was caught every night of every trapping period for four years.

Her last capture was on 18 October 1999. Thus, a total of four years and four days elapsed between first and last captures (1,464 days). If we assume an additional 200 days between birth and first capture, this individual survived a total of 1,664 days or 55.5 months in the wild (including 41 days in the lab). I have evidence that juveniles gain between 0.5 and 1.25 g per day in the wild but have not attempted to separate the effects of year, site, gender or any other variable. Thus, an assumed weight gain of 1.0 g per day is a conservative estimate. This extends the known minimum longevity for a wild woodrat from the previously reported 49 and 50 months to at least 55.5 months.

Literature Cited


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