

Raccoon Populations: Does Human Disturbance Increase Mortality?

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ABSTRACT

Human disturbance is thought to be the major cause of mortality in raccoon (*Procyon lotor*) populations in North America. To test that hypothesis, characteristics of raccoon populations associated with low human disturbance (no trapping, low vehicular traffic, etc.) and high human disturbance (trapping, moderate vehicular traffic, etc.) were compared in the Manhattan, Kansas area in fall 1986. Estimated annual mortality in the raccoon population exposed to little human disturbance was 26.5%, significantly lower than the 52.5% in the population inhabiting an area of high human disturbance. Counts of placental scars reflected greater reproductive activity in the raccoon population in the highly disturbed area. The higher reproductive activity of raccoons inhabiting the area of high human disturbance may offset the higher mortality experienced by that population.

The raccoon (*Procyon lotor*) is an adaptable mammal with a widespread range in North America (Sanderson, 1987). Stains (1956) presented data that characterized general parameters of raccoon populations in Kansas. Sanderson (1987) concluded from several studies that human activities are the primary causes of mortality in raccoon populations. To test Sanderson's conclusion, the characteristics of a raccoon population inhabiting an area with a large amount of human disturbance were compared to those of a raccoon population exposed to little human disturbance. Specifically, it was hypothesized that the raccoon population in the area with greater human disturbance would have higher mortality than the population experiencing little human disturbance. Herein, are the results of that comparison.

MATERIALS AND METHODS

Body weight, sex, age, and reproductive data were obtained from raccoons collected from two areas in northeastern Kansas during November and