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## **Sex and age specific infestation rates of raccoons (*Procyon lotor*) by American dog ticks (*Dermacentor variabilis*)**

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American dog ticks (*Dermacentor variabilis*) can have profound direct and indirect effects on human and wildlife hosts. However, there is little information on their short- or long-term rates of parasitism in free-ranging wildlife populations. In Missouri, raccoons (*Procyon lotor*) are the principal host of dog ticks, with tick prevalence reaching up to 90%. Our goal was to determine the intensity of non-engorged (short-term) and engorged (long-term) tick infestations among different age, sex, and reproductive classes of raccoons. From May to July 2005 we captured 105 raccoons across eight populations residing in predominantly forested ecosystems of central Missouri. Raccoons were sexed, weighed, and aged by examining tooth wear, genital morphology, and body size. Ticks were sampled by direct, two-minute timed observations to estimate tick abundance. Non-engorged and engorged ticks infested males, lactating females, and non-lactating females in decreasing levels of intensity. There was no correlation between weight and the intensity of tick infestation, but tick burdens generally increased with age.