Tracking Prevalence of Intestinal Parasitic Infection Rates in Stray Felines on Oahu

Ayling, Darwynn (School: Kalaheo High School)
Teramura, Lucy (School: Kalaheo High School)

This project tracked intestinal parasites in stray feline populations on Oahu to assess severity of the presence of parasites in the environment with posed zoonotic risks. Using fecal flotation, we tested the hypothesis that assessing rates of intestinal parasitic infections in stray felines on Oahu will yield high rates of infection with higher prevalence of hookworms, higher prevalence in females, and higher prevalence in younger cats (under six months of age). Fecal flotations were performed on fifty felines around Oahu, to which those samples were screened under a microscope to identify intestinal parasites. Detected parasites were recorded and total infection rate, the prevalence of individual parasites, and rate of infection in relation to age and sex were analyzed. Results show an 80% infection rate, with Roundworms being the most prevalent parasite. Of the samples tested, more females were more commonly infected with parasites, and cats aged six-months and up were slightly more infected. This study shows that the total rate of parasitic infection in felines on Oahu is high, roundworms are the most prevalent parasite, females show higher rates of infection, and felines of different ages all showed relatively similar susceptibility to infection. This data suggests that the zoonotic risks of these parasites in the State of Hawaii is high, therefore action is needed to mitigate the stray cat population in an ethical way to ensure that both the animal and human population is protected.

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