

PRELIMINARY SURVEY OF GASTROINTESTINAL PARASITES IN WILD WHITE-FACED CAPUCHINS (*CEBUS CAPUCINUS*) IN COSTA RICA

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Studies of primate-parasite relationships in the neotropics have been limited mainly to howling monkeys (*Alouatta spp.*). Capuchins (*Cebus spp.*) have omnivorous diets and use multiple levels of the canopy, including the forest floor. This diversity of food items consumed and niches occupied may expose capuchins to a variety of parasite taxa. We examined parasite prevalence and species richness in four habituated groups of *Cebus capucinus* in the highly seasonal tropical dry forest of Santa Rosa Sector, Área de Conservación Guanacaste, Costa Rica. We collected 831 fecal samples from 88 individually-identified individuals over 13-months between September 2007 and August 2009. Eleven parasite species were recovered using fecal flotation, sedimentation, and immunofluorescence techniques: five nematodes (*Filaroides sp.*, *Protospirura sp.*, *Strongyloides sp.*, a Trichostrongylid, and an unidentified larval form), one Dilepidid cestode, one unidentified acanthocephalan, and four protozoa (*Entamoeba coli*, *Giardia sp.*, *Isospora sp.*, and one unidentified protozoan cyst). 79% of the samples were infected with at least one parasite species and infected individuals tested positive for an average of 1.76 ± 0.99 parasite species. Prevalences of *Strongyloides sp.*, *Filaroides sp.* and the unidentified protozoan cyst were higher in females than males. Ten parasites were less prevalent in the dry season (January-April) than the early wet (May-August) or late wet (September-December) seasons. *Giardia sp.* was most prevalent in the dry season which likely results from the ideal transmission conditions for *Giardia sp.* in the late wet season. This study represents the first intensive sampling of gastrointestinal parasites of *Cebus capucinus*.

Keywords: parasites, seasonality, Cebus, Costa Rica