Stray dog population dynamics at university of Sao Paulo Campus, Brazil

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A longitudinal study was carried out to describe the stray dog population dynamics in University of Sao Paulo Campus, Brazil from November 2010 and November 2011. The Campus is located inside the urban area of Sao Paulo, the biggest city of Brazil, with a human population over 11 million. Its 4.2 square km are walled, with 10 access gates, allowing stray dogs to move in and out of the campus freely. Over 100,000 people and 50,000 vehicles circulate in the campus daily. Five observations were made during the study period, using a two-sample method. The same route was made in all observations, being traveled twice each day. Observed animals were photographed and the sight coordinates were obtained using a GPS device. The stray population showed seasonality associated with class periods and holidays, varying from 55 (44; 76) to 32 (23; 56) individuals. The stray population also showed susceptibility to difference between inward and outward dog movements and to the proportion of females in the population during the study period. Overlapping home ranges were observed in areas where most of people circulate, corresponding to the docile dogs. A feral group was observed close to two forest areas, and no overlapping with other dog's home range was observed for this group. A spatial correlation between dog sights and food sale point distributions was observed, rather than trash bins. A kernel density map showed that high stray dog density is associated with larger organic matter generators, such as university restaurants. One can conclude that preferred food source is the leftover food offered by the restaurant users and bad waste conditioning.