capm 0.4: an *R* package for Companion Animal Population Management

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Thousands of people die from rabies and get diseased of visceral leishmaniasis each year. Also, millions of abandoned dogs and cats die each year. Because dogs and cats are involved in the transmission dynamics of those diseases (in the case of leishmaniasis mainly dogs), companion animal population management is a requirement not only to improve animal welfare but to prevent and to control zoonoses such as the mentioned above. Companion animal population management can be regarded as a set of interventions to modify demographic characteristics (e.g., population size, proportion of fertile and abandoned animals). The **capm** package facilitates to users the implementation of a workflow to collect and analyze data typically needed in companion animal population management. Users can design complex surveys and map selected sampling units; estimate population parameters; simulate population dynamics; simulate the effect of interventions; and prioritize the interventions according with their effect, using sensitivity analysis. The current stable version can be installed from CRAN (`install.packages("capm")`) and unstable version can be installed from a Github repository after loading the **devtools** package (`install_github("capm", "oswaldosantos")`). Additional information and documentation can be found in the web page for the package.