

INTRODUCTION AND OBJECTIVES

Wild boar populations are increasing throughout the world. Geographic and demographic expansion of wild boars could be explained by a combination of socio-economic and ecological changes. The increase in wild boar abundance has driven to an increase in the interaction of this species with human activities. Despite the progressive increase, the population of wild boars in the Parc Nacional del Garraf is the lowest in Catalonia (1,5 wild boards/km²). The management measures in Castelldefels are the campaigns of awareness and the catches with cage and with points of waiting. This paper aims to provide a first approximation to the urban wild boar in Castelldefels with the calculation of density, conducting surveys and an interview with the mayor of the city.

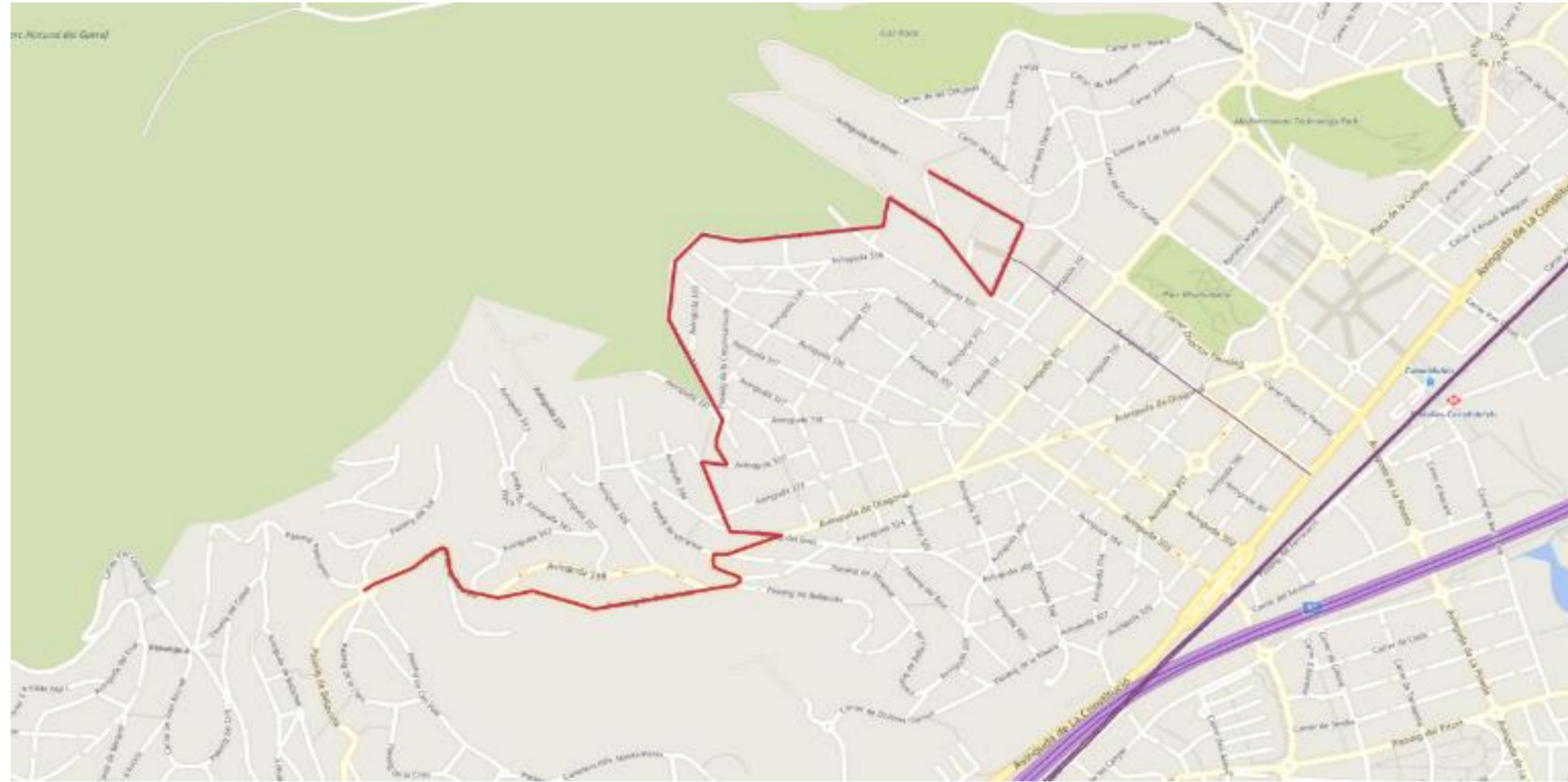


Image 1: The study transect

MATERIALS AND METHODS

-We carried out a transect (Image 1) of 4.2 km and that takes place in three districts of the city. We travel the transect 10,6 times a month at a speed of 20km / h with a car. We note all the sightings.

-Wild boar population was estimated from the transect data by the minimum convex polygons (MCP) method, one of the most used formulas to estimate wildlife populations, using Qgis software to join the observation points.

-We conducted a survey with google survey as well as in the street.

RESULTS

-The annual average density in the study area is 5 individuals / km²

-The months with the highest density are September and October (Graph 1).

-The areas with greater density are street Castanyer and street Passeig Bellavista (Image 2).

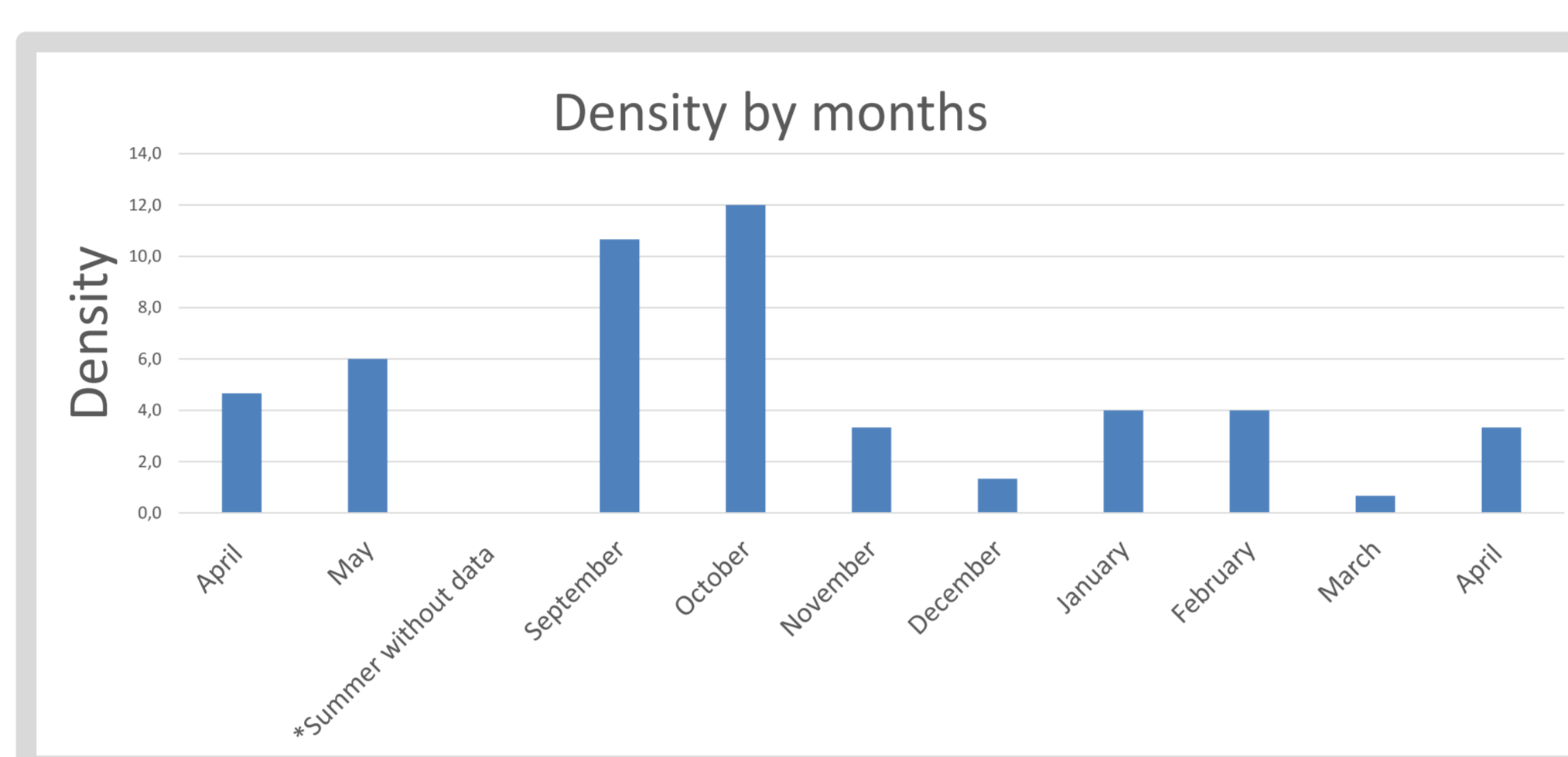
-Graphically we have a positive correlation between the monthly average temperature variable and the transect path efficiency. Statistically there is no significance (Graph 2).

-Graphically we have a negative correlation between the variable of the monthly pluviometry and the efficiency of the route of the transect. Statistically there is no significance (Graph 3).

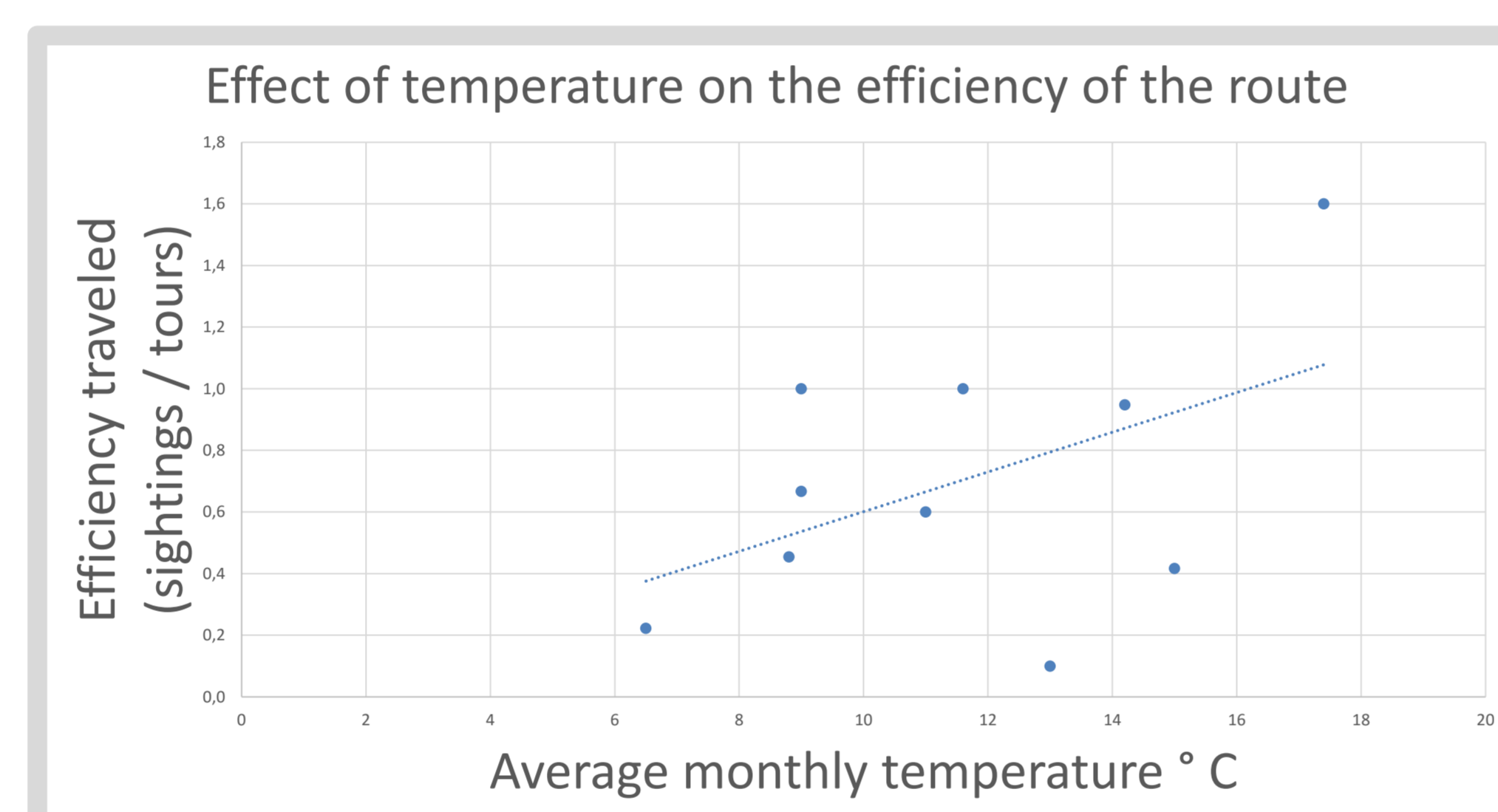
-A 67% of the citizens of Castelldefels like to see wild boars, but only 13% do not consider them a problem at all (Graph 4).



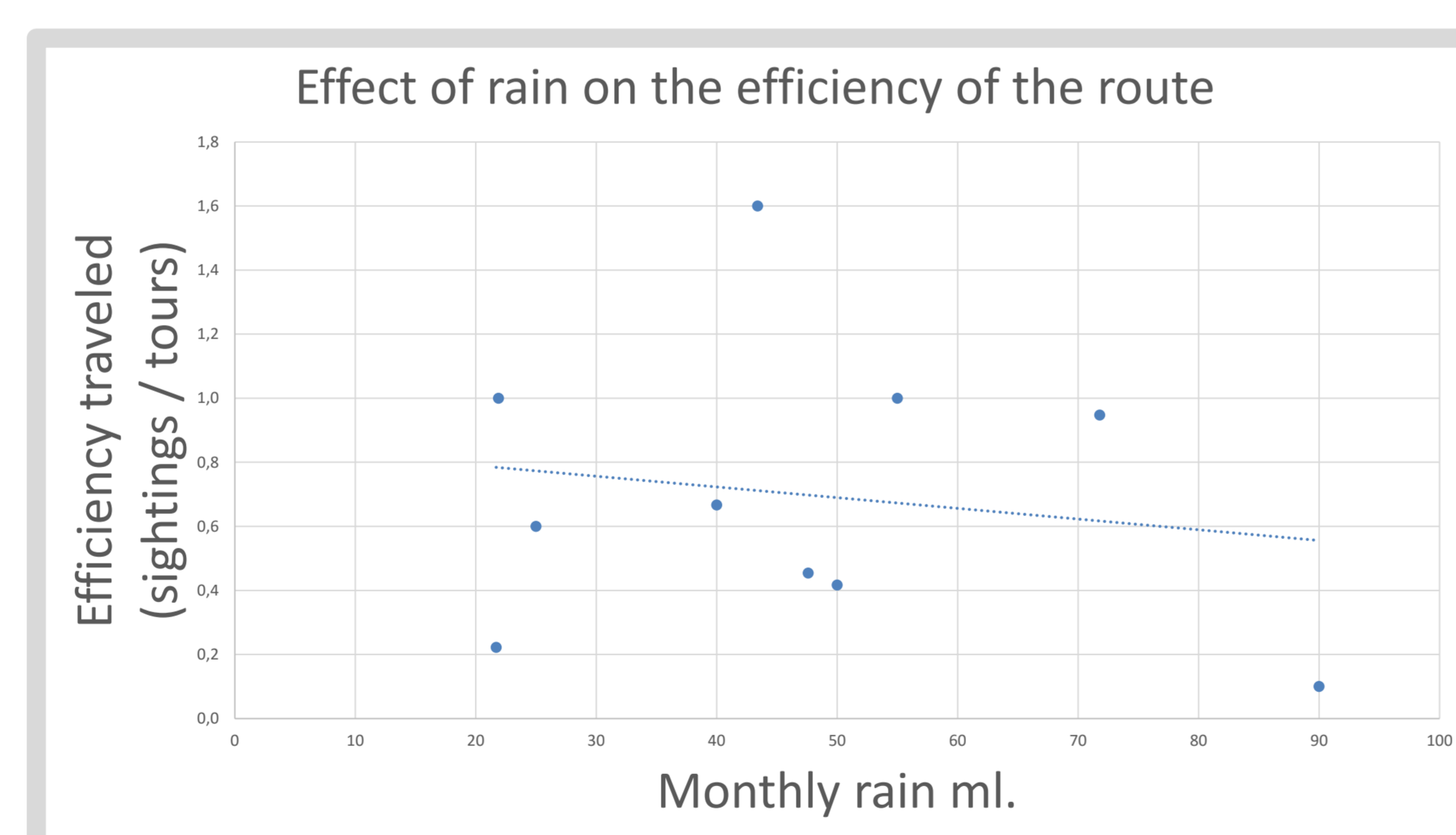
Image 3: A cat and a wild boar eating cat food



Graph 1: Density in the studied area by months



Graph 2: Efficiency of the route in relation to the average monthly temperature in degrees



Graph 3: Efficiency of the route in relation to the average monthly rain in ml.

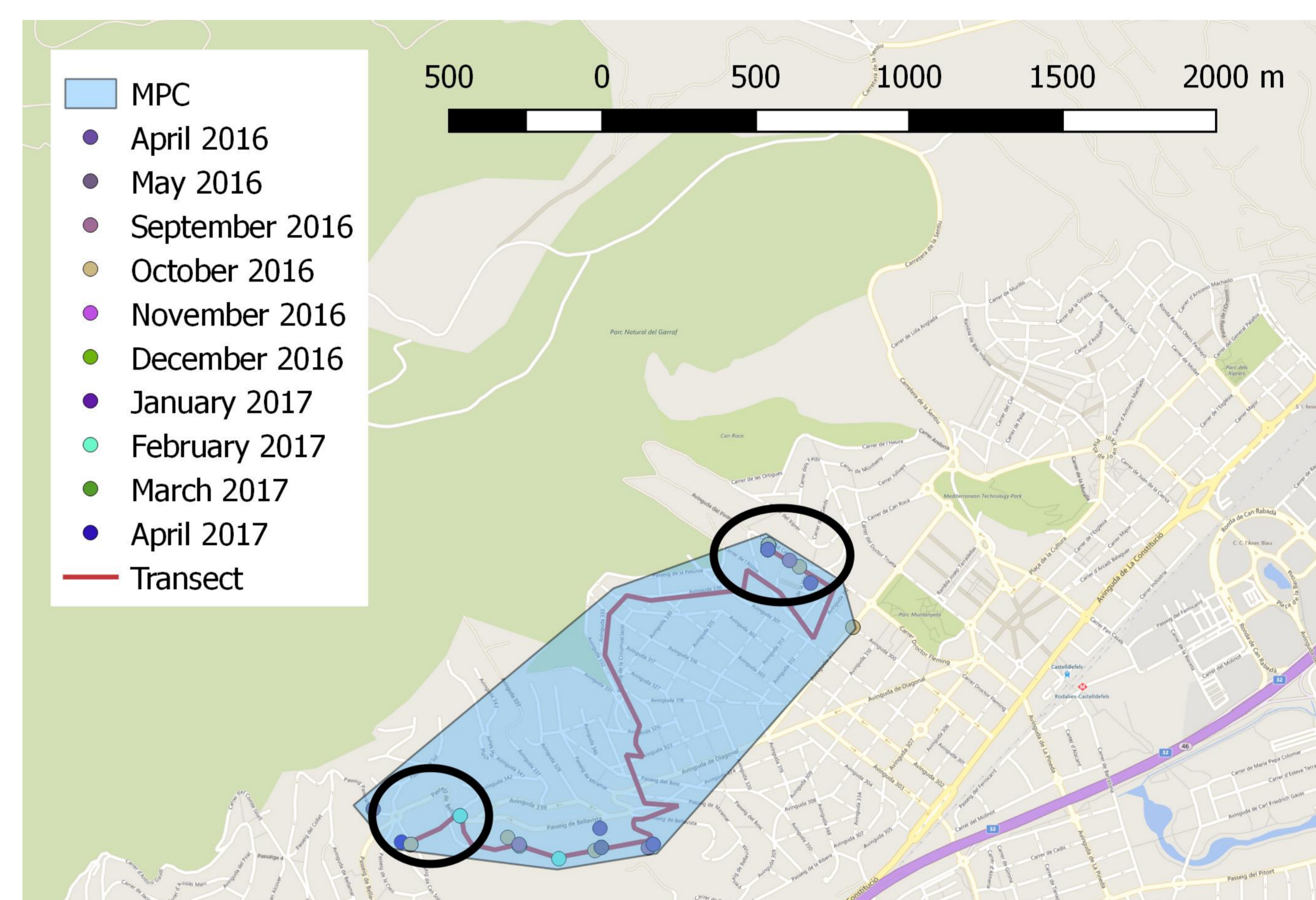
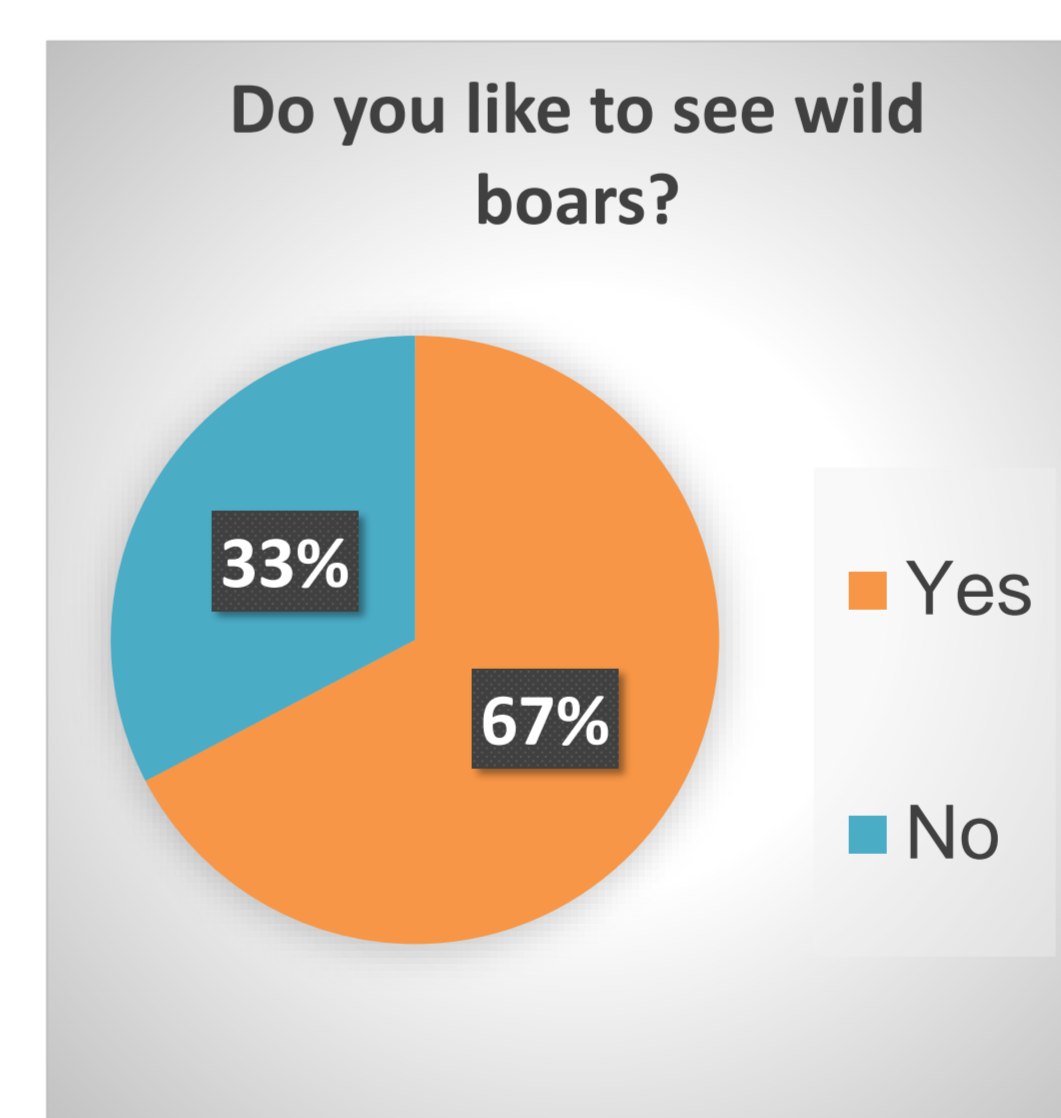
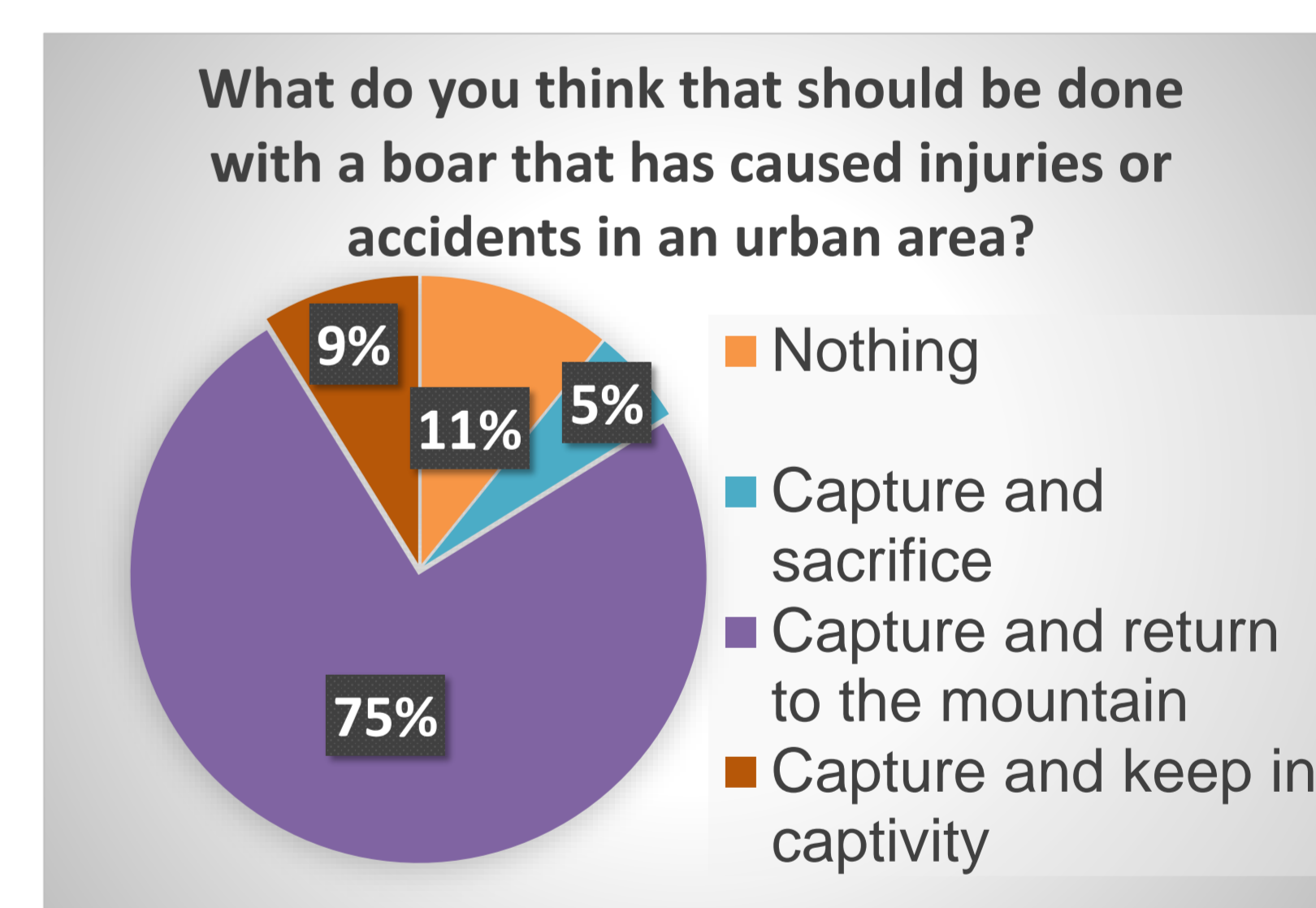


Image 2: The circles indicate areas of study with a higher concentration of wild boar. Points indicate sightings for months



Graph 4: Survey result



Graph 5: Survey result

DICUSSION

The density of wild boars in Castelldefels is three times higher then the density of Parc Natural del Garraf. The months with the highest density are September and October because they are the warmest months (no data was gathered during the summer). The areas with greater density are the streets with colonies of cats because they feed the wild boar whit cat food (Image 3). We may not have significant correlation with rainfall, temperature, and effectiveness because we did not conduct the study during the summer. The degree of acceptance of the wild boar is similar to other urban areas that coexist with wildlife. In La Floresta the acceptance is greater and this could be due to a higher density which leads to a greater acceptance. The population of Castelldefels rejects some of the most effective management measures (Graph 5).

CONCLUSION

The wild boar presence in the urban and peri-urban areas of Castelldefels is a fact and causes problems for citizenship. One of the most determinant factors for the presence of urban wild boar in Castelldefels are the colonies of cats, so it is necessary to control the feeders. The citizens seems to be aware of the problem, but requires more information to avoid rejecting necessary management measures.

