

## INTRODUCTION AND OBJECTIVES:

Coypu is an **invasive exotic species** from South America. Their colonization began with the fur farms, from which they escaped or from where they were released. From there, wild populations have formed in different places. In this case, they reached the lake of Banyoles through the south of France, causing ecological, economic and health consequences.

The aim of this **socioecological study** is to develop a model that integrates both ecological and human components. Citizen perception assessment and information campaigns must precede wildlife management measures in order to gain public acceptance before they can be implemented. In this way, education and awareness campaigns can be carried out.

## METHODS:

To carry out the socioecological study, structure surveys were sent to a **significant and random part of the population of the Pla de l'Estany** region, as well as visitors during the period of January to June 2022. The surveys were **structured** in different sections. The first part determined the characteristics of the people surveyed and the activities they carried out; the second part was to find out if people knew the species and how they perceived them, and the last one determined the solution that the responders would carry out.

With all the information an analysis was done to create a **principal component analysis (PCA)** with the **Rstudio** program.

## RESULTS:

Figure 1. Principal component analysis (PCA)

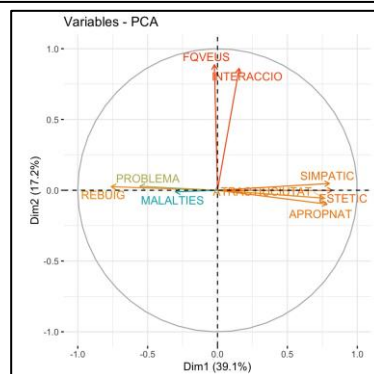
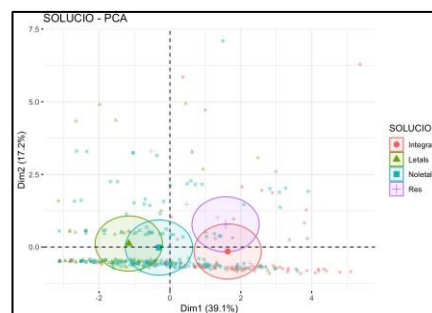


Figure 2. Different groups created according to the given solution.



The surveys were **answered by 380 people** who live in the Pla de l'Estany region or visitors. The gender that answered more surveys was the female with 69%. The age range of the responders was not entirely representative since the broadcast channel was online. According to the results of the surveys, Pla de l'Estany has a **high percentage of the population that is not familiar with the coypus**. Almost half of the population (42.8%) do not know this species and 72.7% have never even seen it. However, a relatively high percentage of citizens (73.3%) believe that the introduction of this species has **negative consequences**, and in the same way 74.2% of the **population wants to eradicate it**.

As for the concept that people have about the species studied, the variables that contribute the most are, first of all, the **experiences** of each individual, followed by the **emotions** it generates and, with less influence, the logical reasoning.

Regarding the final solution that the respondents would carry out: a high percentage (54%) of the population would **eradicate them in a non-lethal way**; 20.9% would **eradicate them with lethal methods**, 22.9% would try to **integrate** them into the environment, and less than 5% of citizens would **do nothing** about it. In this case, the perception of **beauty** is what determines the response of the respondents.

## CONCLUSIONS:

The main factors that drives citizen perceptions are **individual experiences**, followed by the **emotions**. Therefore, logical reasonings are irrelevant to them. In conclusion, due to the results obtained, a population campaign should be developed to change the consciousness of the population.