

Project Update: June 2023

Regarding the effect of *C. haigi* on the soil, we found a mound density of 124/ha. The average area occupied by the mound was 222.2 ± 28.8 m²/ha (representing 2.2% of the surface), and the volume of excavated soil was 14.6 ± 3.4 m³/ha. We also performed the soil physicochemical analysis, and found that soil compaction and rock fragments were lower in the mounds than in the adjacent gaps ($U = 225$, $P = 0.001$; and $t_{29} = 3.696$, $P = 0.001$, respectively); available P was higher in the gaps than in the mounds (test $U = 30$, $P = 0.001$); pH and electrical conductivity (EC) values were similar in mounds and gaps ($t_{29} = -1.930$, $P = 0.064$; and $U = 74$, $P = 0.186$, respectively); and C and N percentages were higher in mounds than in gaps ($U = 194$, $P < 0.001$; and $U = 196$, $P < 0.001$, respectively).

On the other hand, the study of the effects of *C. haigi* on vegetation are still in progress. But, in April 2022, we constructed the enclosures to estimate the effect on vegetation of only this herbivorous rodent (excluding the other large herbivores) and did the first monitoring of vegetation cover. In November 2024, after 2 years we will estimate vegetation cover again. In May, June, and September 2022, and June 2023, we monitored seedlings in mounds and adjacent gaps. We have the last monitoring to do this spring 2023. In March 2023 we also collected soil samples for the seed bank study in mounds and gaps. This spring we will start the greenhouse germination and monitoring protocol that will last until the fall of 2024.

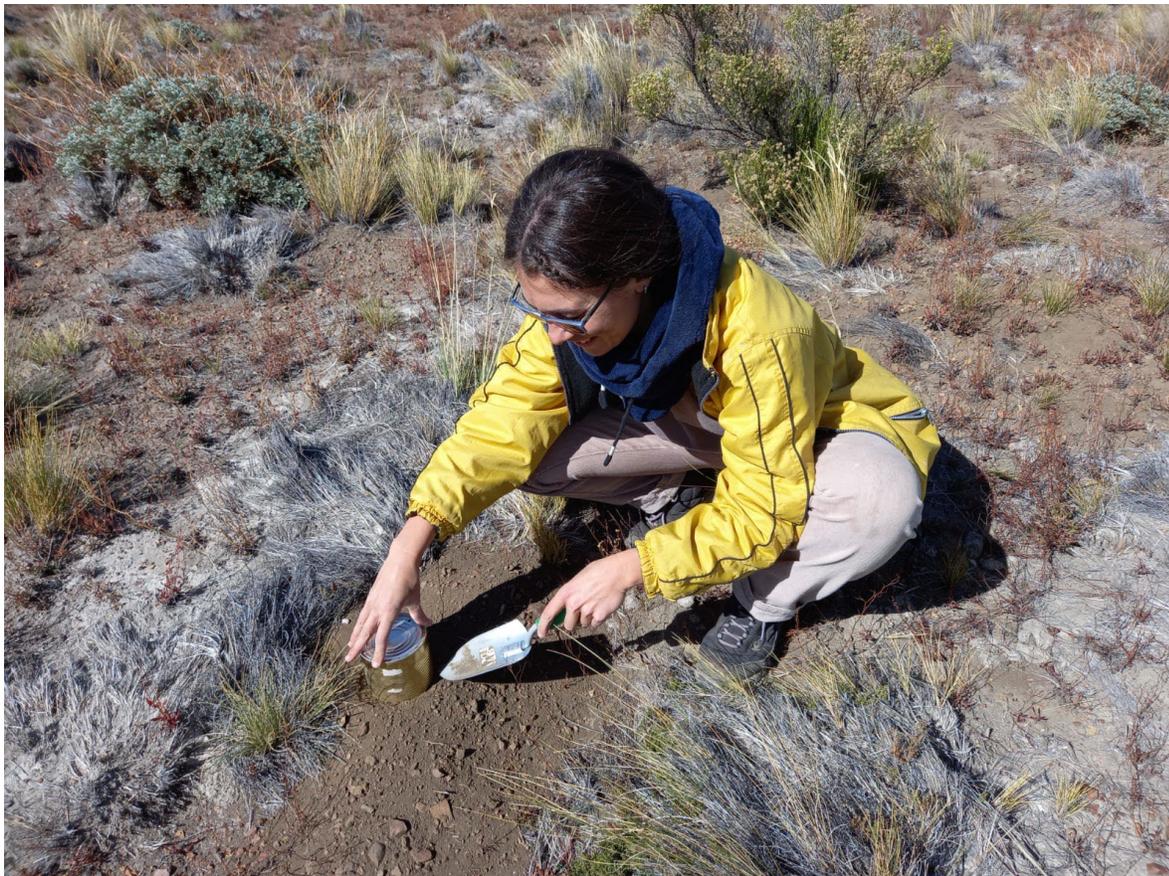
Also, we held a workshop with the workers of the San Ramon Ranch (our study site). We showed our project and the activities we were going to carry out. In addition, we commented on the implications of this subterranean rodent in the grasslands of northwestern Patagonia. We estimate to do a final workshop in November 2024 to show our results, and then have a conversation with the workers about what their perception and thinking is of the effect of this native rodent on this grassland, and whether it influences livestock management (which is the main economic activity on the ranch), and what they think about the conservation implications.



Installation of the enclosure.



Monitoring of seedlings in a tuco-tuco mound.



Extraction of soil samples to be taken to the laboratory.