

*Rabbit damage to vineyards confronts farmers and hunters in Spain*

Miguel Delibes-Mateos, Beatriz Arroyo, Jorge Ruiz, Fernando E. Garrido, Steve Redpath, Rafael Villafuerte

In Europe, people and wild animals frequently interact, with some wildlife species causing damage to human livelihoods. The management of wildlife damage often causes confrontation between people affected by such damage, who demand the killing of involved wildlife species, and those who defend the enhancement of their populations, like conservationists wanting to protect vulnerable species or hunters when game species are involved. These conflicts are generally damaging to both wildlife and the livelihoods and well-being of the people involved. We explored the conflict over the management of European rabbits that cause damage to vineyards in Spanish farmland areas, by conducting interviews and discussions with farmers, hunters (who are legally responsible in Spain for controlling game populations causing damage) and members of official environmental and agricultural agencies in two sites in Spain. We found that most controversies between farmers and hunters arose because of their different perceptions of the causes of rabbit damage and the way in which it should be managed. Farmers, either implicitly or explicitly, blamed hunters for excessive rabbit numbers as they considered that, when asked to do so (i.e. when crop damage by rabbits is denounced), they do not kill rabbits in sufficient numbers because this would compromise leisure hunting in the future. In contrast, aggressive farming practices were viewed by hunters as the root of rabbit damage to crops because they considered that no alternative food sources are available for rabbits in intensive agricultural areas. Our results also highlight that the intensity of the conflict was perceived as having decreased after rabbit numbers (and thus their damage) declined as a consequence of the outbreak of a rabbit viral disease. Nevertheless, certain scepticism about a definitive solution remained among the interviewees, and a latent conflict persisted. In fact, the reciprocal distrust among the parties and their inevitably

confronting interests suggest that disputes could escalate in the future if rabbits increased, or if certain events changed the current status quo triggering further discontent. The latter could include current recurrent pressures from farming organizations to increase rabbit control or ongoing claims from the hunting sector to include environmental measures aimed at the recovery of small-game in the new European CAP.



*Rabbit warren in a vineyard in one of the study areas. In the left corner detail of a branch damaged by rabbits. Photo credit: Rafael Villafuerte.*

Plain language summary from article:

Delibes-Mateos, M, Arroyo, B, Ruiz, J, Garrido, FE, Redpath, S, Villafuerte, R. Conflict and cooperation in the management of European rabbit *Oryctolagus cuniculus* damage to agriculture in Spain. *People Nat.* 2020; 00: 1– 14. <https://doi.org/10.1002/pan3.10157>