Oryx

Hazards for the maned wolf in Argentina: are sightings in new areas always good news?

By Marcela Orozco, 18th January 2023

Few wild canids are as enigmatic as the maned wolf, the larger of the South American canids. Its crepuscular habits, ungainly gait, peculiar behaviours and characteristic vocalizations audible at long distances make this species unique. *Chrysocyon brachyurus* is also the only species in its genus.

Exploring wetlands in search of small prey, or walking among the grasslands of northern Argentina with just its large ears visible, the maned wolf attracted the attention of many researchers and naturalists in the early 1990s. However, studies on the ecology of the species in Argentina are scarce, perhaps because of its elusive habits and low population densities.

Maned wolf on a rural road, in a rice field and in Reserva El Mesias in Argentina. Photos: Victor Merlino (left), Fabian Gromenida (middle) and Leonardo Leiva (right).

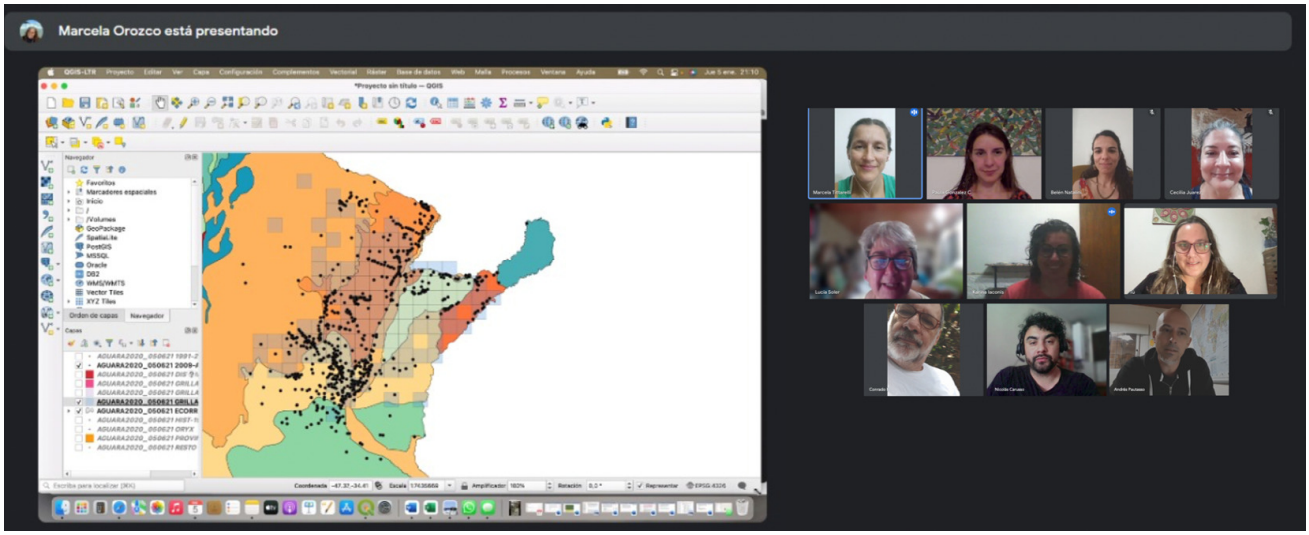
About 10 years ago, the maned wolf began to be seen more frequently in various regions of Argentina, even outside the previously known distribution range, published in *Oryx* in 2011. At first glance, this would seem like good news for the species.

However, a closer look at the recent data was needed. So, a group of maned wolf researchers from various institutions and disciplines decided to review all available information on the presence of

the maned wolf in Argentina during the previous decade.

Maned wolf on a rural road and in Reserva El Mesias in Santa Fe, Argentina. Photos: Victor Merlino (left) and Leonardo Leiva (right).

Our work began with a systematic review, and progressed to the exploration of databases and old field notebooks. To collect, select and organize all the information, we held several virtual meetings, most of them during the Covid-19 pandemic. During these meetings, each participant shared information about the presence of the species in Argentina, including locations and field knowledge of any new records. At the same time, a search for unpublished evidence on the presence of the maned wolf in Argentina was carried out through unstructured surveys with protected areas personnel, naturalists, key informants and researchers.



Our work uncovered a total of 1,051 records of the maned wolf in Argentina during 2009–2021. Surprisingly, almost 50% of the reported records were of wolves exposed to hazards. Of these, more than half were of wolves killed on roads, and the others were live captures, and individuals roaming in urban areas, hunted, injured, sick, attacked by dogs or affected by drought and/or fire.

Analyses of the environmental situation in Argentina highlight intense modification of the maned wolf's habitats. Our study updates information on the occurrence of the species in Argentina and provides a heatmap to visualize the records of maned wolves exposed to hazards. This heatmap highlights the importance of a risk analysis to reveal threat hotspots for the maned wolf in Argentina, and identifies areas where conservation efforts for the species are urgently required.

Left: A heatmap for visualizing records of maned wolves exposed to particular hazards. Right: Fire advancing on a dry wetland in central Argentina. Photo: Pablo Rodriguez.

Our article also poses interesting new questions: What are the factors that affect the colonization of new areas by the maned wolf, how do habitat changes influence the survival of the species, and what is the viability of maned wolf populations in the southern margin of their range?

Further research on this intriguing species is coming!

The article "Updating the distribution range of the maned wolf Chrysocyon brachyurus in Argentina" is available in *Oryx—The International Journal of Conservation.*

A maned wolf in a rice field. Video: Fabian Gromenida

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