**Project Update: December 2021**

During the summer season of 2021 (particularly February and March 2021) we have started the field work in the study area.

Vegetation surveys
We collected seeds of *Prosopis nigra* and *Sarcomphalus mistol* in four forest patches. For each harvested tree, we measured the distance of all trees of the same species in a radius of 25m: if the harvested tree was *P. nigra*, then we measured the distance of all *P. nigra* trees present in such radius. This measured was done to evaluate the local influence of tree neighbours on reproductive parameters of the focal tree (the harvested trees). Moreover, the selected forest patches present different forest cover in their local landscape, representing a forest cover gradient at landscape scale. This design allows us to test the effects of forest loss on the reproductive potential of the studies species.



Left: Marking waypoints location of all the neighbour trees around a focal tree employing a GPS. Right: Fruits of Sarcomphalus mistol in one of the surveyed forest patch.

Bird surveys
We conducted bird surveys in four forest patches. As we have data collected in previous campaigns of the Rufford Grant award (field work conducted during the years 2018-2019), these new four forest patches were specially selected to have a complete gradient of forest cover at landscape scale.

We will continue with the vegetation and bird surveys during this season (December 2021 to March 2022).

Conducting the bird surveys.

Social and Conservation Actions

We have started contacting with new local people with the aim to promote some conservation actions in the study area. We meet to members of a community in Villa Rosario del Saladillo (a town in the study area) that are owner of two forest patches of native forest, each one composed by 300 ha approximately. They want to

conserve such forest patches and conduct ecotourism activities in the area. They asked as for help in this regard. Our initial contribution will be to generate a baseline of avian and vegetation diversity in the area. Moreover, in such town there is a school in which we are planning to generate some environmental education activities.



The interior of one of the forest patch in Villa Rosario del Saladillo.

Moreover, we have contacted with members of the staff who work in the Ministry of Agriculture and Livestock of Córdoba province. We will work together (our team and the Ministry staff) to link the future native plants production with farmers that have cultures in the region. This action will promote that local people will be able to sell the plants produced in the greenhouse to local farmers according to the Provincial Agroforest Law 10467.
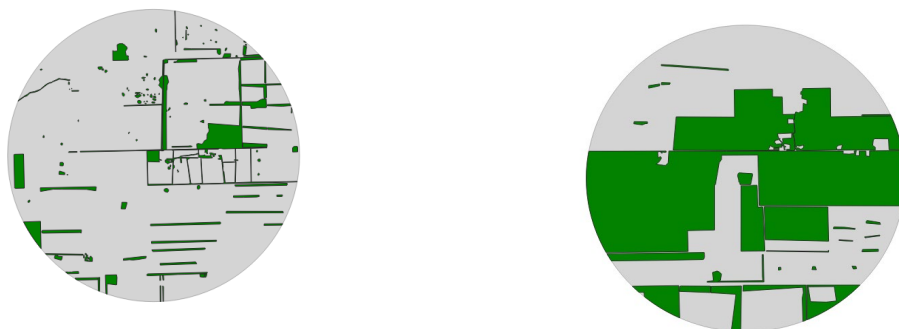


Image that shows two of the study landscapes. Forest cover is represented by green colour whereas agriculture matrix is represented by grey colour. The forest patch

located in the centre of each landscape is the focal patch where surveys are conducted. The figure represents a contrasting situation in the amount of forest cover withing landscape. The first landscape (left side of the figure) has a low percentage forest cover, whereas the second landscape (right) have a high percentage of forest cover.

Analysis of Satellite Images
We have measured the forest cover around each focal forest patch using the free software QGIS.

Acknowledgments