

Project Update: July 2021

I prioritised Atlantic Forest remnants of Argentina based on their contribution to the connectivity requirements of sensitive mammals. To do that, I evaluated forest connectivity for five species that varied in body size and dispersal capacity to represent the entire mammal assemblage. I used camera-trap databases and developed occupancy models to estimate each species' resistance matrix and node attributes (**Figure 1**).

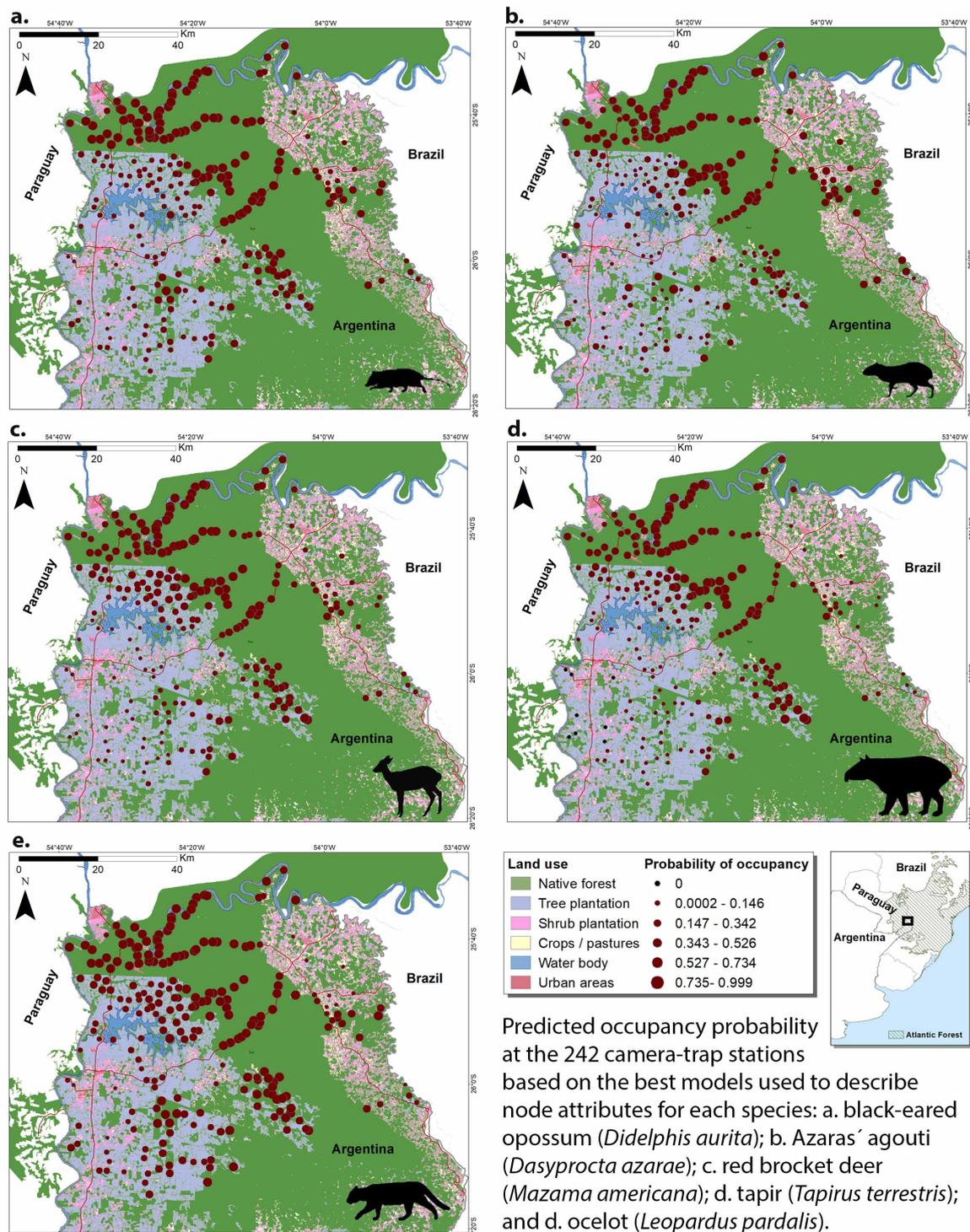


Figure 1

Then, I used graph-based models to analyse habitat connectivity and availability for each species, estimating the BC(PC) centrality index and the three fractions of the percentage of variation in the probability connectivity index (dPC) for each node (dPCintra, dPCflux, dPCconnector). I combined the information of these indexes for the five species and characterised forest patches according to their conservation priority (Figure 2 and 3). I also evaluated differences in patch prioritisation depending on the species (e.g., some patches were particularly relevant for smaller species with low dispersal capabilities for which they constitute suitable habitats, and other patches were irreplaceable stepping stones that connected habitat patches for species with intermediate dispersal distances).

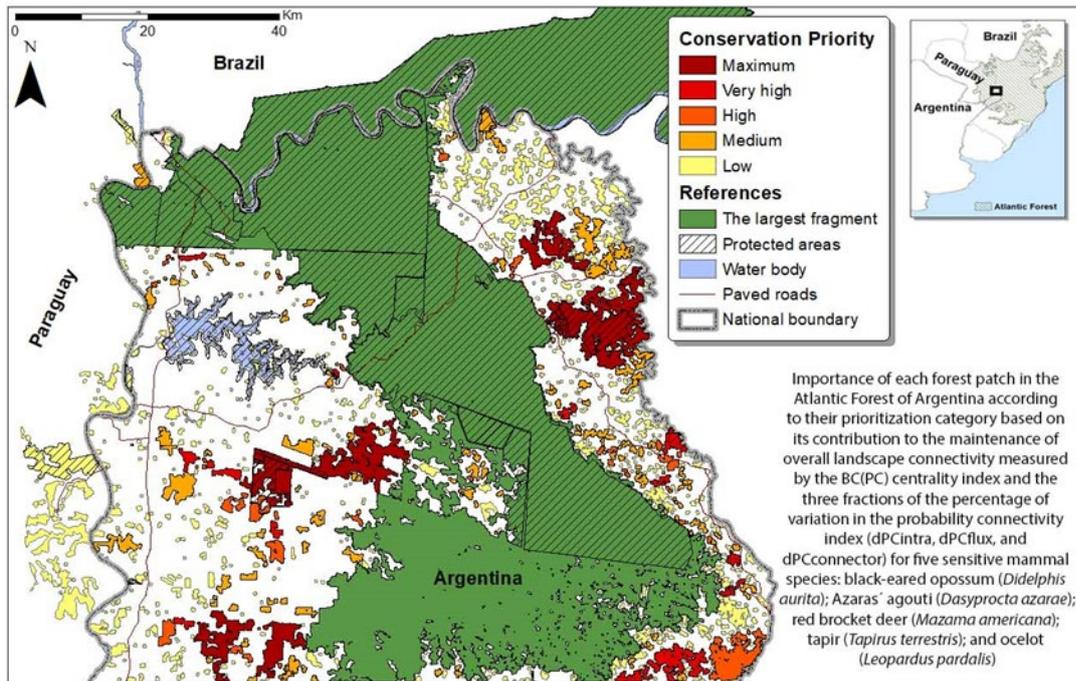


Figure 2

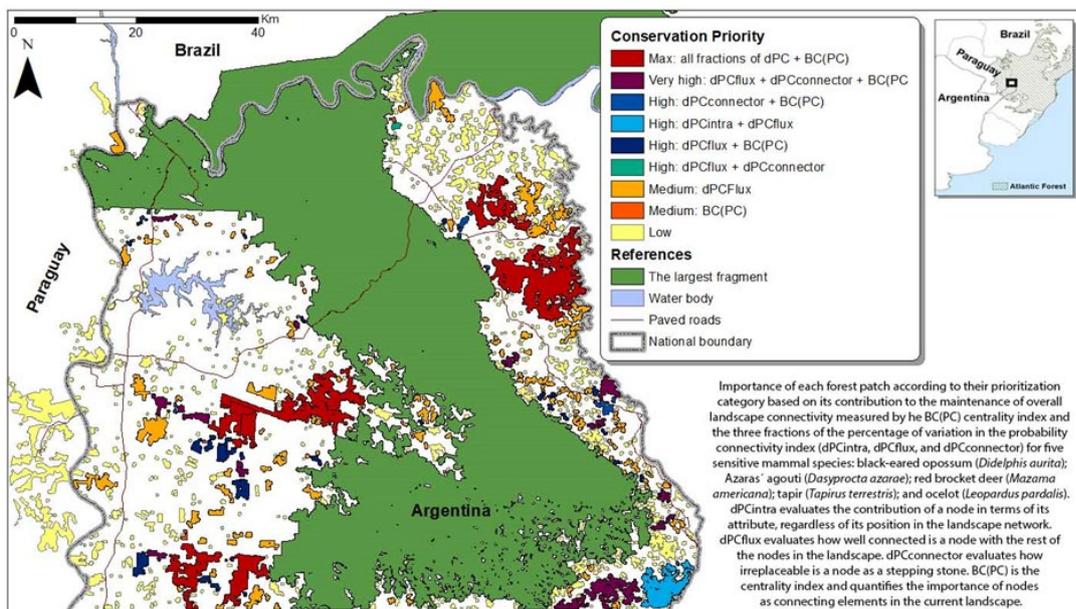


Figure 3

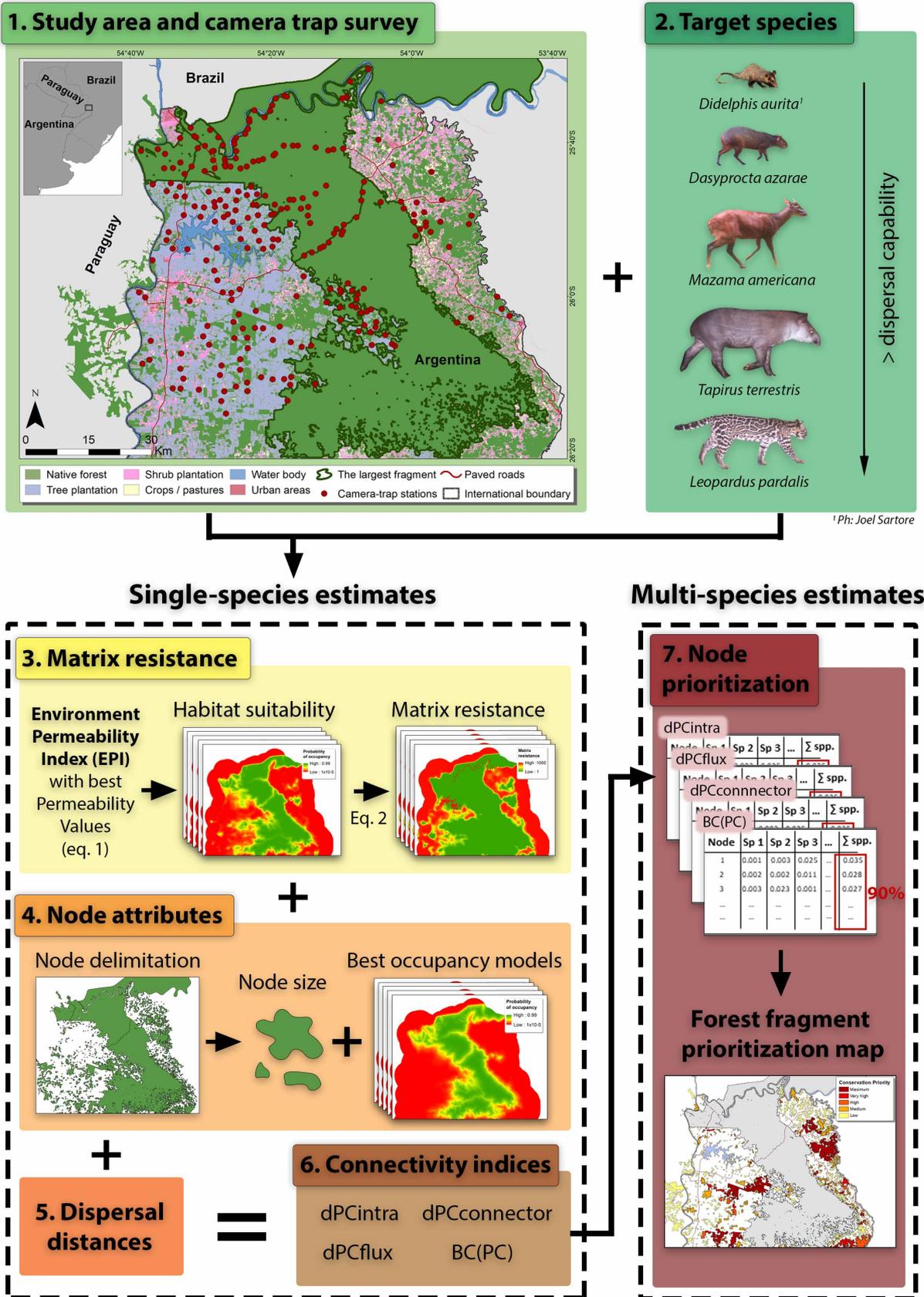


Figure 4

Figure 4 illustrates the steps used in the methodology. **Figures 2 and 3** have the same results (the forest prioritization map) with the difference that **Figure 3** includes the details of the indices that were important for each patch (i.e., **Figure 2** is a summary of **Figure 3**). You can use either of the 2 of them. Also, if you want me to change something about figures legends or if you need more information about the project do not hesitate to ask for it.

I presented preliminary results at the 2020 Society Conservation GIS (SCGIS) Virtual Conference. With the final results of this modelling process, I prepared a manuscript to be sent to the journal Biological Conservation (I sent the final version to a native English translator to check the grammar last week).