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LANDSCAPES DEFINITION FOR VERTEBRATE MODELLING IN A WETLAND

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A satellite simulated SAC - C image was used to define different landscapes as a base for modelling the habitat and the population dynamics of vertebrate species in the Iberá wetlands (Corrientes, Argentina). This vast macro-system is isolated and difficult to explore, and such a tool can be very useful.

Landscapes definition was carried out using field data and a simulated SAC-C image (175 m. spatial resolution). We achieve definition of seven different habitats that will be used as base for the simulated population models of charismatic vertebrate species.

The proposed methodology is based on homogeneous polygons definition on the field through the utilization of GPS data and location of vegetation censuses on a topographic map. The results were the definition of 7 different habitats (lagoons, tidelands, weedlands, and 4 types of dammedlands) with different characteristic of vegetation coverage and anegability corresponding to different habitat suitabilities for vertebrate species.

The discrimination between different habitats was acceptable, with certainty in a range between 92.5% and 100% for five habitats, and 50 to 66% for two very similar types of damedlands, with an overall class performance of 98.6%. Therefore SAC-C images appear as a good option to define landscapes in vast zones and of low environmental variability such as Ibera and similar wetland systems given their spatial and spectral resolution.