

## ID474

### PP42 - DROUGHT, FIRE AND LENTIBULARIACEAE: A CASE STUDY IN THE PANTANAL OF MATO GROSSO DO SUL - BRAZIL

Ranielly Garcia-Silva<sup>1</sup>, Wener Hugo Arruda Moreno<sup>2</sup>, **María Ana Farinaccio**<sup>1</sup>

<sup>1</sup>Universidade Federal De Mato Grosso Do Sul, <sup>2</sup>Instituto Homem Pantaneiro

The Pantanal has a well-defined cycle of floods and dry periods marked by the occurrence of forest fires. Our objective was to evaluate how the presence of Lentibulariaceae in the Pantanal of Mato Grosso do Sul (MS), Brazil, was affected by the large forest fires that affected the Pantanal between 2020 and 2021. We compared data collected from this family with data from monitoring burned areas using the Moderate-Resolution Imaging Spectroradiometer (MODIS) and the Land Use and Land Cover classes from Collection 7 of MapBiomas using the QGIS software. We gathered information from collections carried out from 1892 to date, totaling 200 records, of which 26.5% occurred in Grassland; 19% in Savanna Formation; 18.5% in River, Lake and Ocean; and 16.5% in Wetland. We observed that, compared to the year of the last collection record, 2016, the classes Wetland; Savanna Formation and River, Lake and Ocean showed a reduction in their areas, 31%, 62% and 33%, respectively, in 2021, while there was an increase of 38% in the area of Grassland. The reduction in these areas may be associated with the forest fires of 2020 and 2021, which consumed around 29,913 km<sup>2</sup> of the Pantanal in MS, with these areas comprising 23.5% of Grassland; 9.8% from Savanna Formation; 1.8% River, Lake and Ocean; and 25.8% from Wetland. Despite the resilience mentioned for Pantanal, fires, associated with the long periods of drought in 2020 and 2021, significantly reduced this taxon, given the changes that occurred in environments with a recognized presence.

## ID482

### PP21 - THE DESIGN OF A WEBSIG PLATFORM TO SUPPORT RURAL FIRE RISK MANAGEMENT AT LOCAL LEVEL

Diogo Miguel Pinto<sup>1,2</sup>, André Samora-Arvela<sup>1,2</sup>, Célia Figueiras<sup>1,3</sup>, Cláudia Nunes Magalhães<sup>1</sup>, Marco Dias<sup>4</sup>, Master Margarida Jerónimo<sup>5</sup>

<sup>1</sup> University of Porto, <sup>2</sup>Centre of Studies in Geography and Spatial Planning, <sup>3</sup>Barcelos City Council, <sup>4</sup>Góis City Council, <sup>5</sup>Seia City Council

#### Objectives

This work aims to create a Websig platform that can be used by local administration (Municipalities and Parishes) and operational entities (Firefighters, etc.) with the aim of making rural fire risk management more efficient at the local level and improve risk communication.

#### Methods

First, the websig was structured, based on the communication needs identified through the previous questionnaire and close contact with the municipalities. After designing the structure of the websig, a focus group was set up with experts from four municipalities who pre-tested the websig and gave their opinion on its improvement and on greater adequacy to the needs of the local administration.

#### Results

It was found, in the first instance, that there were gaps in the communities' access to relevant information in a context of fire risk, as well as problems and difficulties in communication between the populations and the local authorities. Therefore, it was necessary to eliminate this difficulty, using a websig, which, with the testing and evaluation of the experts, became even more robust, allowing to overcome the identified flaws.

#### Conclusions

The creation of this type of platform allows streamlining processes in the management of rural fire risk, enabling easier communication between institutions, and between institutions and communities. Thus, while allowing the participation of the population in risk management (citizen science), it makes communities more resilient in a context of increasing complexity and severity of fires.