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MOUNTAIN AND FOOTHILL WETLANDS SURROUNDING GUADALQUIVIR VALLEY (JAÉN, ANDALUSIA, SPAIN). RECENT HISTORICAL EVOLUTION AND MAIN ANTHROPICAL AGRESSIONS.

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INTRODUCTION & AIM

Wetlands are considered one of the most valued ecosystems in the world, due to their transitional role between the terrestrial and aquatic environments, which favors biodiversity. These ecosystems also provide some services that are very useful for the humanity, such as flood regulation, or their involvement in essential processes, such as nutrient cycles. That is why the analysis of the historical evolution of these ecosystems and the effects they have suffered is a key aspect to understanding the current state of the conservation of wetlands in a region.

STUDY AREA & METHODS

The study area is located in the mountains and foothills of the province of Jaén, Andalusia (Spain); which included a set of 48 ponds. This study is based on research carried out for more than twenty years and through an intensive bibliographic search and the use of tools, such as the website of the National Geographic Institute (https://fototeca.cnig.es/fototeca/). The evolution of wetlands has been obtained for a total of 68 years, specifically, (i) American flight, series B, 1956-57; (ii) Interministerial flight (1973-1976); (iii) National flight 1981-1986; (iv) OLISTAT (1997-1998); (v) SIGPAC (1997-2003) and (vi) PNOA 2022. Once these images were obtained, the temporal evolution of these wetlands was analyzed, evaluating the changes generated in the wetland surface and its surroundings; key aspects in the structure and functioning of these aquatic ecosystems

RESULTS & DISCUSSION

Main aggressions/changes	Wetlands affected
Communication route	1
Desicated	3
Leisure, tourism/ Pressure by communication route	1
Low variation	9
Morphological alteration of the basin	1
Morphological alteration of the basin / anthropic transformation	2
Morphological alteration of the basin/Leisure, tourism	1
Pressure by communication route	3
Pond's basin invasion	17
Pond's basin invasion/ Leisure, tourism	1
Pond's basin invasion/Construction of an irrigation pond	1
Pond's basin invasion /Leisure, tourism	1
Pond's basin invasion/Pressure by communication route	3
Pond's basin invasion/Pressure by communication route/ Drainage	1
Pond's basin invasion/Pressure by communication route/Construction of an irrigation pond	1
Pressure from urbanisation	2
Total general	48

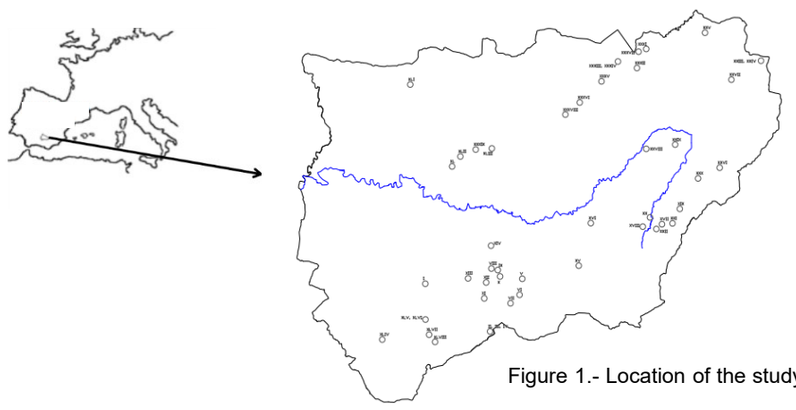
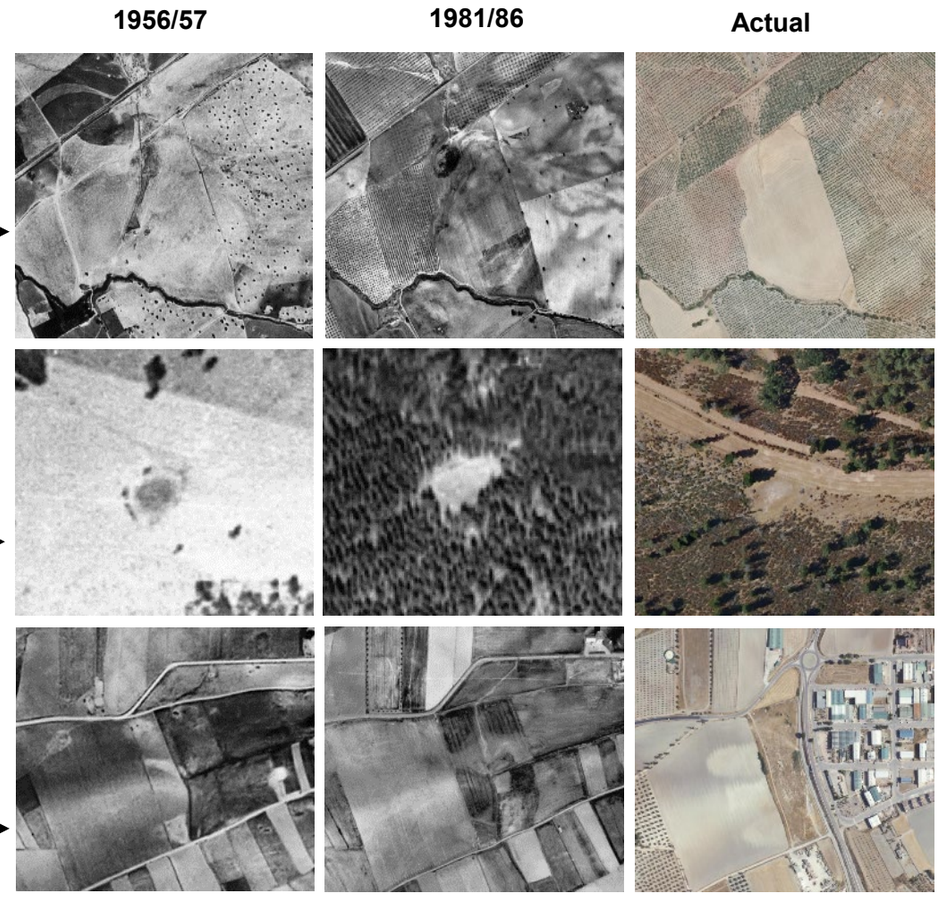


Figure 1.- Location of the study wetlands



CONCLUSION

The majority of wetlands (> 70%) located in mountain and foothill areas have a certain degree of degradation. They present a partial or total occupation of their basin, with a degradation that also implies a loss of ecosystem values. The conservation of these singular ecosystems require the assimilation of a new concept of wetlands, which enhances their uses and values as essential points of the ecosystems in which they are inserted, and based on a sustainable use of the territory, in accordance with their traditional uses.