

The Situation of the Amphibians of the Alto Balsas Guerrero: Towards a Regional Strategy of Conservation

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ABSTRACT

Abstract: The present study lies mainly in the scanty information on the herpetofauna that exists for the Balsas region in particular and in general for the state of Guerrero. **Aim:** Describe the variety of herpetofauna present in the region of Balsas, Guerrero Mexico. **Material and methods:** A systematic review and sampling of reptiles and amphibians and the registration technique was used by visual encounter. **Results:** Therefore 61 species described for Guerrero, 11 species were recorded in the area of separate study in five families and seven genera where 3 amphibian species are endemic to the country, according to NOM-059, were documented 3 species in special protection and a (*Agalychnis dacnicolor*) **Conclusion:** One of the major problems that has the high Rafts are the removal of wild species, by which it is indispensable to create strategies for management and conservation of the area, which is considered a priority, the task is to raise awareness to the people to improve and do not destroy the natural habitats.

Key words: herpetofauna, Amphibians, conservation, natural habitats.

INTRODUCTION

The importance of the present study lies mainly in the scanty information on the herpetofauna that exists for the Balsas region in particular and in general for the state of Guerrero, which is one of the entities with the greatest number of amphibians and reptiles of the country¹. The majority of the studies faunal in the state have been concentrated in Sierra Madre del Sur, there remain large gaps of information for the depression of the rafts and the Coastal Plain of the Mexican Pacific. The state of Guerrero with 61 species, is a comparatively rich region in amphibians, but it is also the region with a degree of threat. The present work herpetofaunístico was held in the town of Chaucingo located inside the high rafts of Guerrero.

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The geographical position and the great complexity of the relief are factors which allow the existence of climatic conditions marked in the depression of the rafts, which causes times clearly obvious as summer or "rainy season" or "dry season"² and, according to the results (t-test of Hutchinson) there is a significant difference ($P < 0.05$) between these, in terms of diversity. The diversity was greater in the rainy season ($H' = 1.25$); this because there was a greater number of species and individuals.

For most amphibians, this time creates an environment suitable for the launching of the playback and increase in prey abundance potential, due to variations in climate that influence them, which is reflected in the increase in the diversity herpetofaunística³. Therefore 61 species described for Guerrero, 11 species were recorded in the area of separate study in five families and seven genera where 3 amphibian species are endemic to the country, according to NOM-059, were documented 3 species in special protection and a (*Agalychnis dacnicolor*) in Appendix II of CITES (2010)

It was also analyzed the use of microhabitat by the herpetofauna where were considered five categories⁴ these were established according to the characteristics of the atmosphere, which the microhabitat more crowded by the amphibians was the "riparian" with 13 species (*Agalychnis dacnicolor*, *Eleutherodactylus nitidus*, *Hyla arenicolor*, *Hypopachus variolosus*, *Incilius occidentalis*, *Lithobates berlandieri*, *L. forreri*, *L. pustulosus* and *Rhinella marina*, etc.), due to the fact that this category includes the species that inhabit the shores of rivers and streams, because that depends on the aquatic environment for reproduction, there are greater availability of resources for its power and its morphological characteristics the skin of amphibians must be permeable, because they are using your skin moist and vascular to obtain oxygen from the air; because of this permeability, airborne contaminants water rapidly enter into your body and build up in the tissue faster than in other animals. So they are considered as environmental indicators⁵.



Área de estudio, ejido Chaucingo



Agalychnis dacnicolor

RESULTS AND DISCUSSION

The final results of this study should be considered preliminary, since it is only sampling within the ejido of Chaucingo and areas seasoned it is therefore likely that the listing was generated represent only a percentage of the wealth of the site, which possibly was left outside to species that due to their rarity could not be registered. It is therefore important to emphasize that one of the major problems that has the high Rafts are the insecurity and the removal of wild species, by which it is indispensable to create strategies for management and conservation of the area, which is considered a priority as it provides great environmental services in addition to safeguard to a large number of wild species in the region. The idea of protecting and improving the habitat should not be the subject of suspicion and controversy, the task is to raise awareness to the people to improve and do not destroy the natural habitats.

CONCLUSION

One of the major problems that has the high Rafts are the removal of wild species, by which it is indispensable to create strategies for management and conservation of the area, which is considered a priority, the task is to raise awareness to the people to improve and do not destroy the natural habitats.

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