

Health and conservation of wild species

The world is currently facing a crisis of biodiversity loss. While large part of this phenomenon can be attributed to unsustainable resource exploitation, another central potentiating factor is the rapid propagation of diseases in wild populations.

There are various examples of this trend. However, the most emblematic case is that of amphibians worldwide, where a pandemic of chytridiomycosis has resulted in the extinction of various anurans in Australia and Central and South America. In Chile, this disease is of particular importance due to the high quantity of endemic Anura species.

It is within this framework that Dr. Claudio Soto Azat, Director of the Center for Sustainability Research at Universidad Andrés Bello –together with a multidisciplinary team of associate investigators– is evaluating the distribution and impact of two emerging amphibious diseases, chytridiomycosis and the Ranavirus.

"The purpose of our work is to inform the respective authorities of conservation methods for amphibians, fish, and reptiles. Moreover, we are evaluating the role of invasive species on the epidemiology of emerging diseases in aquatic organisms and the combined effects of these diseases with other processes, such as changes in soil use and global warming," explains the Director of the Center for Sustainability Research.

Dr. Soto Azat adds that, "Through our research, we have contributed towards understanding the global distribution of chytridiomycosis. We have reported the presence of this disease within the entire national territory, in addition to providing the first evidence of the Ranavirus in the African frog (Xenopus laevis), which has invaded a large part of Chile's central region."

Finally, the UNAB investigator highlights that an important part of ongoing research for biodiversity recovering is the rehabilitation of threatened species. In support of this effort, Dr. Claudio Soto notes that the recently established Wild Animal Rehabilitation Unit of the School for Veterinary Medicine at UNAB aims to implement the highest standards of animal welfare in Chile, support investigation on wild animals, and contribute towards educating society on caring for and respecting the environment.

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