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## ECOLOGY AND CONSERVATION OF THE SNAIL CHILINA ANGUSTA: A SPECIES OF TH...

Concepcion Chile

Edit project



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### Ecology and conservation of the snail *Chilina angusta*: A species of the Atacama Desert threatened of extinction.

The project takes place in the one spring in which this snail occurs in the Atacama Desert and is to assess its population status and viability, interaction with other species and its habitat, to update its conservation status (which probably ought to be CR) and develop conservation actions. Freshwater invertebrates are the most diverse group on the planet when standardized per unit area. A high proportion of them present serious conservation problems, in which anthropogenic stressors are combined with the intrinsic vulnerability of the species. The latter depends on the combination of: a) reduced geographic range, b) scarce habitat, c) low vagility and d) low population density. One of the extreme examples in the world of this condition is the snail *Chilina angusta* Phillippi 1860, whose only known population inhabits a wetland (artesian spring) in the Quebrada de Paposo, on the coast of the Atacama Desert (25°01'47 "S; 70°27'20 "W). The objective of this study was to obtain basic biological and ecological information to support its classification in IUCN conservation categories and to support a conservation program for the species. A survey of wetlands in the Antofagasta region was carried out in May and August 2022, to establish the species' geographic distribution range and area of occupancy. Quebrada de Paposo was the only locality where it was detected. A habitat characterization was carried out, considering surface area, physical habitat structure, flow, water quality, sediments, periphyton, vascular flora and accompanying fauna. Population censuses and size structure analysis were carried out, and direct observations were made on the behavior of the organisms. In addition, egg-mass records and embryo counts per clutch were made. *Ch. angusta* has amphibious habits, preferring to inhabit shallow and flowing water environments. It feeds mainly on diatoms, although sometimes it feeds on filamentous chlorophytes. It is only found inhabiting three sectors of the same wetland (sites 3-5), which for most of the year are isolated from each

#### Focus species category



### Invertebrate

Ongoing project

#### Project theme

Desert Policy-Making Freshwater

#### Supported by



#### Focus species

Paposo snail  
*Chilina angusta*

Vulnerable

#### Organization

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