

evolutionary adaptation of the embryonic epidermis and more extensive cellular plasticity. Future studies will compare salt tolerance abilities of embryos across phylogenetic groups and ecotypes to better understand the eco-evo-devo of salt tolerance of this critical lifestage of amphibians.

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Predicting Habitat Suitability for the Japanese Giant Salamander (*Andrias japonicus*) using Species Distribution Model: A Major Key for Conservation Measures

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Understanding the ecological and geographical distribution of species is crucial for conservation biology. Species Distribution Models (SDMs) represent powerful tools that enable the construction of species' habitat suitability and identification of environmental predictors influencing its distribution. The Cryptobranchidae family host the largest amphibians of the Earth (up to 1.8 m) and with some taxa highly endangered or extinct. With its large size, its benthic behaviour and slow mode of life, the Japanese giant salamander (*Andrias japonicus*) is an original top predator in lotic ecosystems. Their populations face declines but knowledge regarding the general ecology of this species remains little known, particularly concerning habitat and climate suitability due to a lack of global analyses at the scale of the distribution range. This is yet particularly needed as Japan experience major climatic changes which may further endanger local populations. Our study aims therefore to generate SDMs to (1) establish habitat suitability (i.e., probability of presence) of the Japanese giant salamander in Japan and (2) identify the primary environmental predictors contributing to the selected model. To this end, we collected hundreds of presence data points of giant salamanders across Japan and built maximum entropy (MaxEnt) models with fine scale (1 km²) environmental data. Our findings help to delineate the suitable areas for conservation across Japan and to disentangle among the key landscape, anthropogenic, topographic and climatic variables that explain the distribution of this species. Altogether, these results advance our understanding of the ecology of the Japanese giant salamander and provide valuable insights for conservation decisions regarding this emblematic yet imperilled species.

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The Decline of the Populations of the Endemic and Endangered Lizard *Liolaemus lutzae*: are we Witnessing the Extinction of a Species?

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BOOK OF ABSTRACTS

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