

# Conservation of newt endemism

**Authors:** D. Guinart<sup>1</sup>, S. Solórzano<sup>1</sup>, J. Grau<sup>1</sup>, C. Carbó<sup>1</sup>, P. Varona<sup>1</sup>, J. Argemí<sup>1</sup>, J. Barber<sup>1</sup>, F. Amat<sup>2</sup> & G. García<sup>3</sup> (<sup>1</sup>Diputació de Barcelona; <sup>2</sup>Museu de Ciències Naturals de Granollers; <sup>3</sup>Chester Zoo)

# The project

Calotriton arnoldi is an amphibian endemic to Montseny Natural Park and Biosphere Reserve, Spain. It was recognized as a new taxon in 2005 and (based on its small range and population size) is listed as critically endangered by the IUCN. At the end of 2016, the "Life Tritó Montseny" project (LIFE15 NAT/ES/000757) was launched, which until the end of 2020 will promote around fifty actions to ensure the conservation of *C. arnoldi* and its natural habitat. This project has two main objectives:

- To reduce the threats to Calotriton arnoldi by improving the natural habitat: Minimizing water collection, purifying waste water, recovering rainwater, improving ecological connectivity, and restoring the riverside forest.
- Extend the geographical distribution of Calotriton arnoldi: Increase the number of newts in the wild by reintroducing captive-bred specimens.

Aquatic macroinvertebrate collection



Agreements with land owners



Data collection at meteorological stations



Long term hydrological monitoring system implementation



Riverside habitat restoration

# We are working on five core strategies



### 1. Protection

Achieve greater legal protection for Calotriton arnoldi, including C. arnoldi in the European Habitats Directive and developing a Conservation Plan.



#### 2. Conservation

Promote preventive management, increased captive breeding and reintroduction to ensure the viability of Calotriton arnoldi populations in their natural habitat.



### 3. Habitat

Reduce water withdrawn from streams, improve wastewater treatment, and promote rainwater use with the goal of improving stream quality, ecological connectivity, and riparian forest restoration.



## 4. Research

Increase the collaboration between scientists and environment managers to support research into the ecology and conservation status of Calotriton arnoldi.



## 5. Dissemination and education

Promote awareness of the project through presentations, digital media, and social networks, with the objective of involving local stakeholders and society in general in the conservation of the Montseny riverside habitat and its biodiversity.



Newts are sexed, measured, weighed and photographed



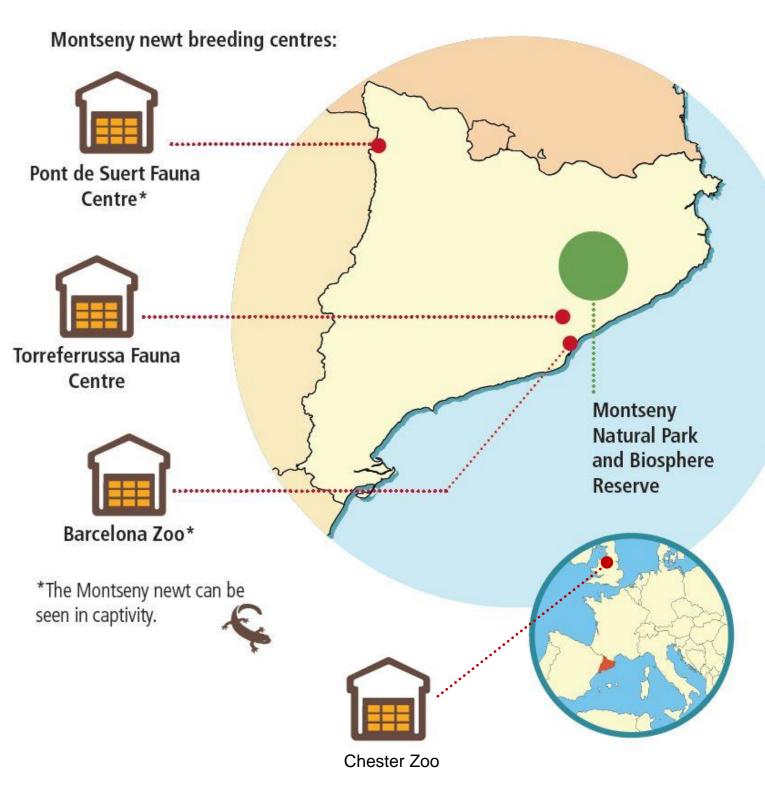
Soil extraction in a bridge construction



Manipulation of Montseny newt during samplings



Vault installation in a stream





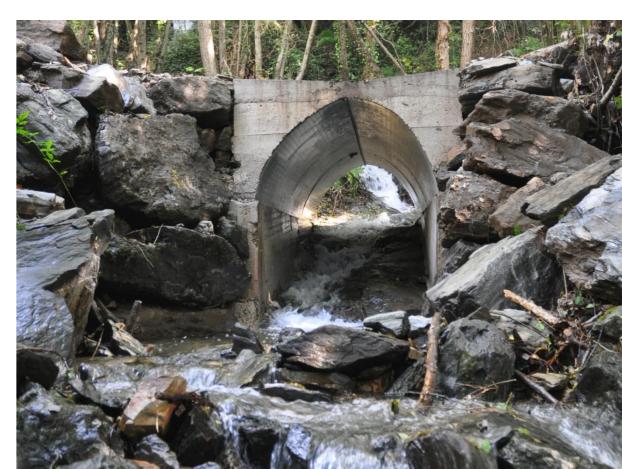
Maintenance tasks in captive breeding facility



Montseny brook newt exhibition



Gathering information on newt characteristics



Bridge to improve ecological connectivity



















#LifeTritóMontseny