



Conservation of the Montseny Newt

Population and habitat management and Education

(LIFE15/ES/000757)



Diputació de Girona



Diputació
Barcelona



Generalitat de Catalunya
Forestal Catalana, SA



Generalitat
de Catalunya



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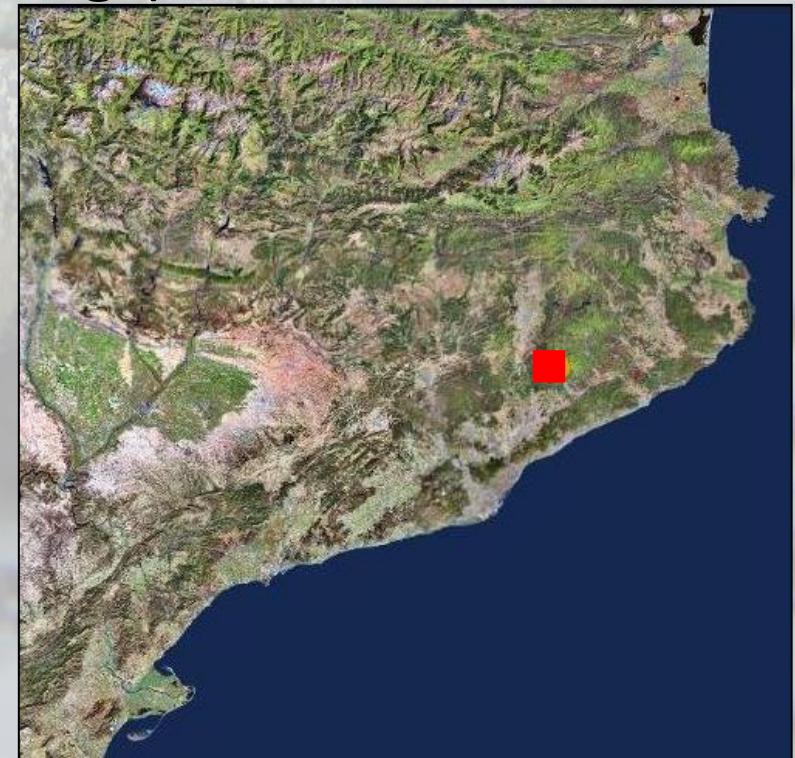
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CHESTER ZOO

Distribution

7 springs distributed on two separated areas:

- Nucleus oriental (3 springs)
- Nucleus occidental (4 springs)

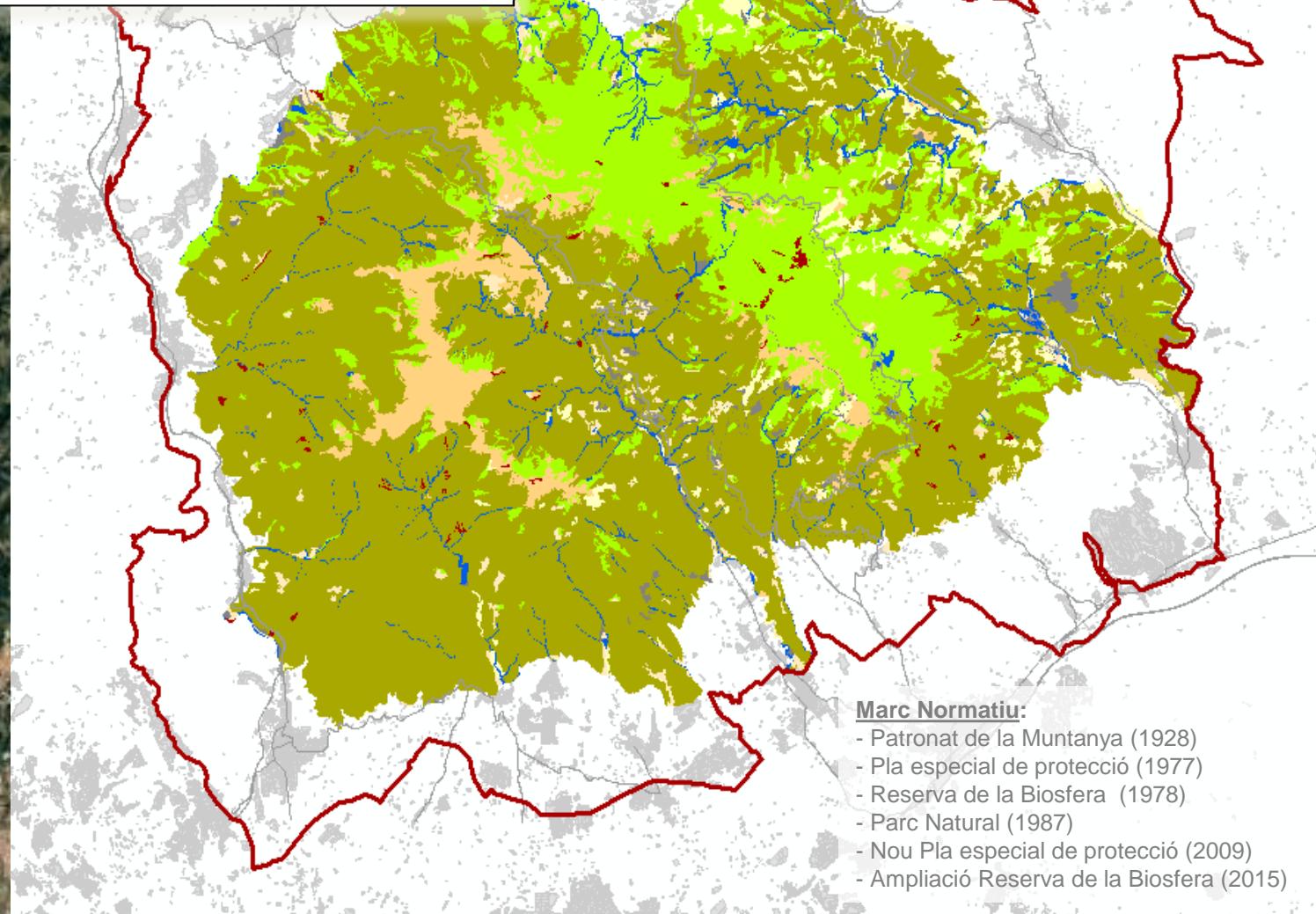


Taxonomy, biogeography and evolution of *Euproctus* (Amphibia: Salamandridae), with the resurrection of the genus *Calotriton* and the description of a new endemic species from the Iberian Peninsula

SALVADOR CARRANZA^{1*} and FELIX AMAT²

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²Museu de Ciències Naturals de Granollers, Area d'Herpetologia, c/Francès Macià 51, E-08400 Granollers, Spain



Morphology

- Smaller than Pyrenean brook newt (*Calotriton asper*)
- Differences on skink



Morphology

Dorsal pigmentation brown “chocolate” without a well defined dorsal line (yellow or pale)

Ventrally translucent

Narrow and “cylindrical” cloaca



Morphology

Occidental

- Males with the front white
- Without yellow spots



Oriental

- Males without white front
- Often with yellow spots



Threats

- Categorised as Critically Endangered
- Area of occupancy less than 10km²
- Change in water table, drying out of streams.
- Estimated less than 1500 adults remaining in the wild.





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ENVIRONMENT
LIFE Programme



European Commission > Environment > LIFE Programme



MONT SENY
PARC NATURAL – RESERVA DE LA BIOSFERA



Site : Parc Natural i Reserva de la Biosfera del Montseny
(Barcelona, Spain) - (50.166,63 ha)

Budget: 2.971.276 € - 60 % **co-funded by EU**

Start: 01/10/2016 - **End:** 31/12/2020

Coordinator: - Diputació de Barcelona

Partners: - Diputació de Girona
- Generalitat Catalunya
- Forestal Catalana, SA
- Zoo de Barcelona
- Chester Zoo

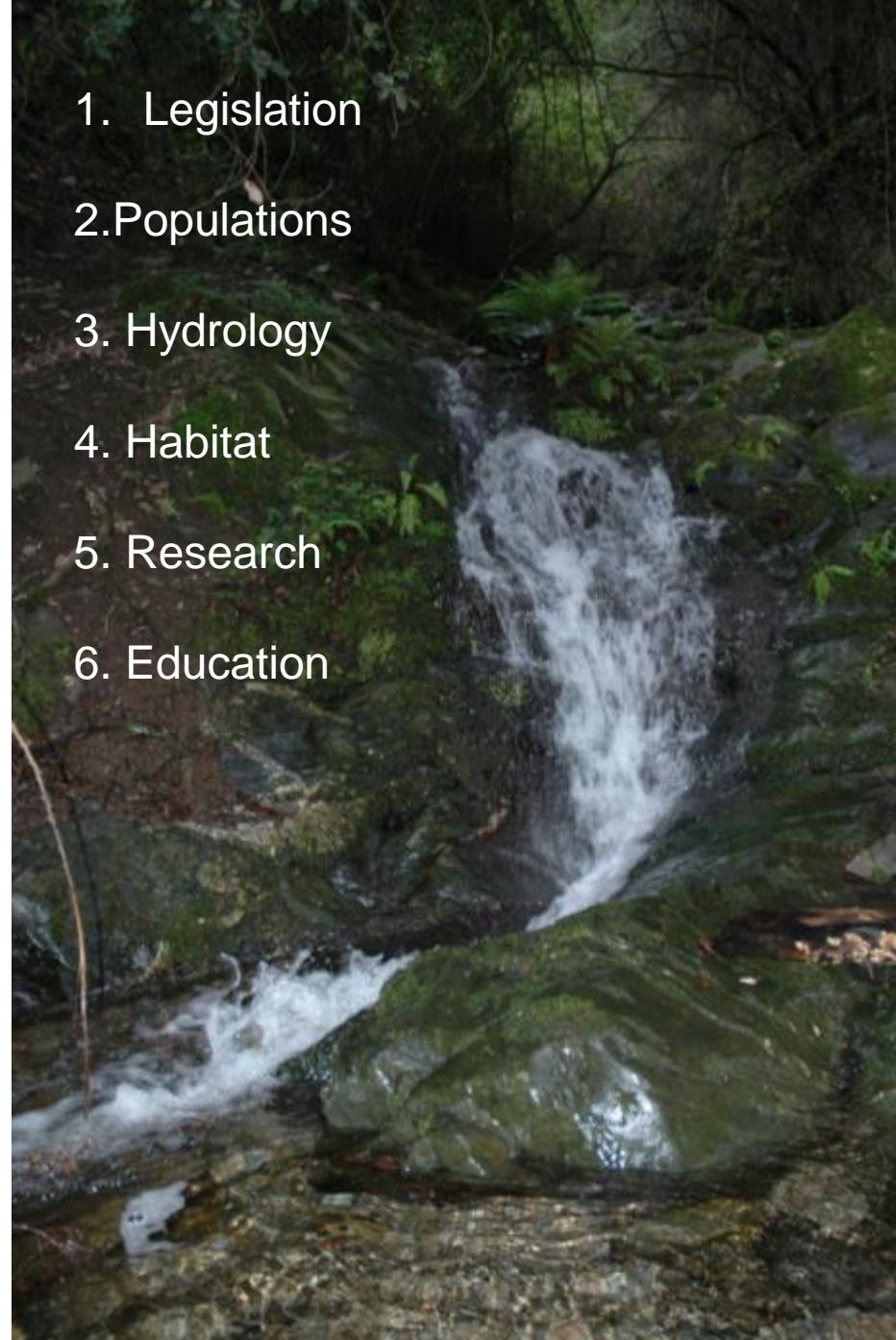
General objective:

Improve the conservation status of the Montseny newt and its riverine habitat

Supporting 49 programmes summarised on 6 working groups



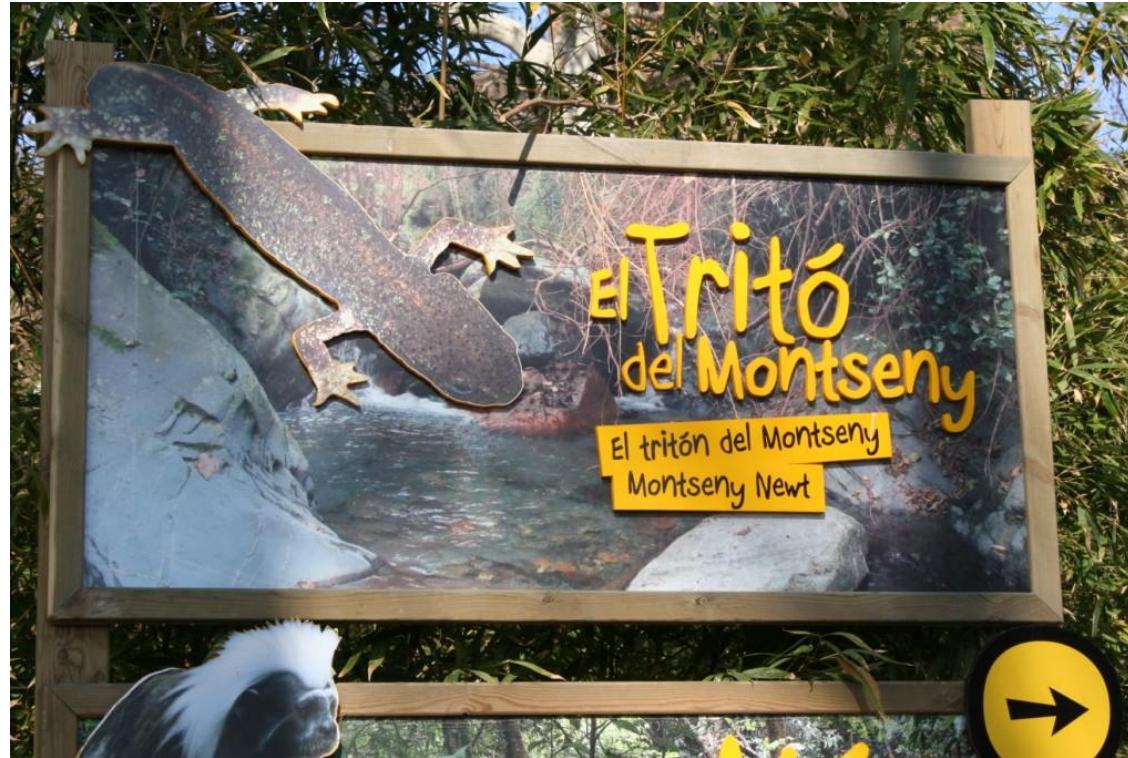
1. Legislation
2. Populations
3. Hydrology
4. Habitat
5. Research
6. Education





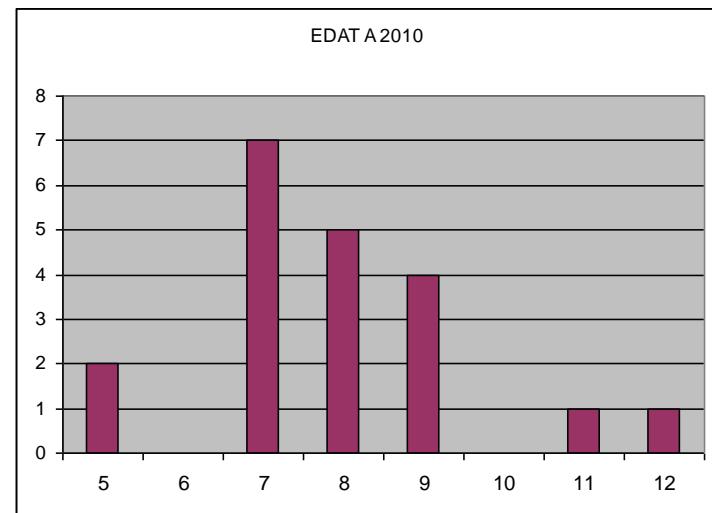
Latest news from the Working groups 2017-18

(LIFE15/ES/000757)



Genetic Reservoir ex situ / Founders

- Captured spring 2007 and 2010:
- Two populations
 - Oriental
 - 6.6.0
 - Occidental
 - 5.5.0



- Total: 11.11.0
- Losts: From Oriental pop. 1.3.0

New Facilities at Torreferrusa

- Increased Capacity
- Separated Room for each population



New Facilities at Torreferrusa





Facilities for Montseny Newts at Barcelona Zoo



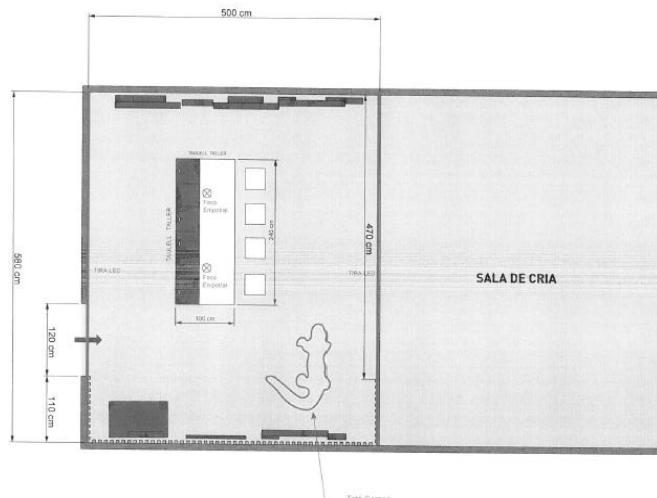
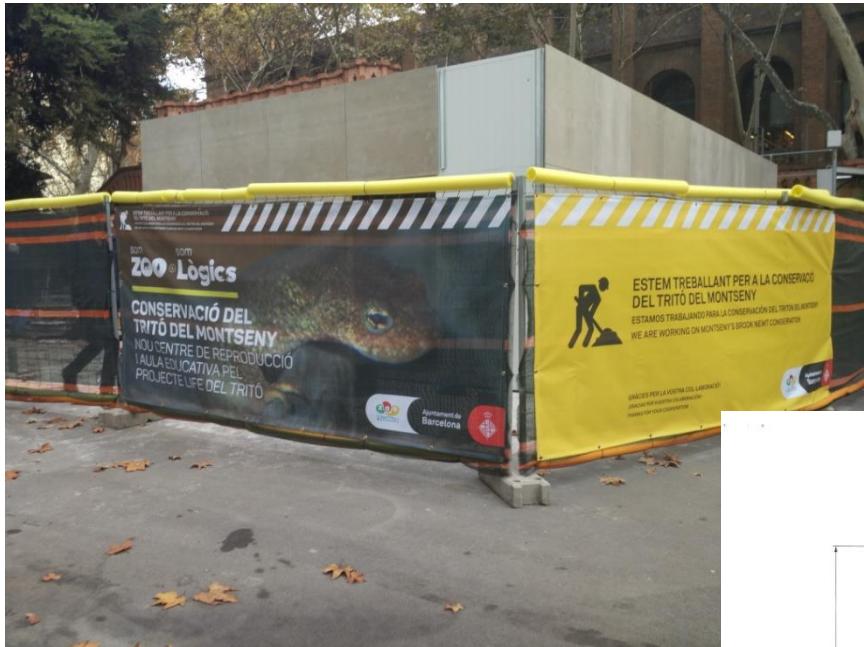
Newly Built Breeding Facility

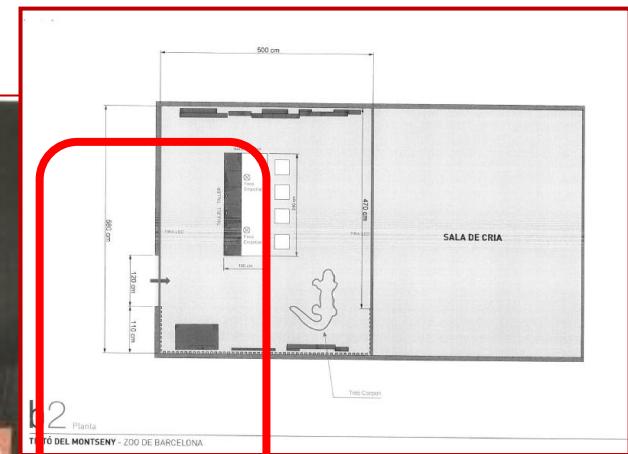




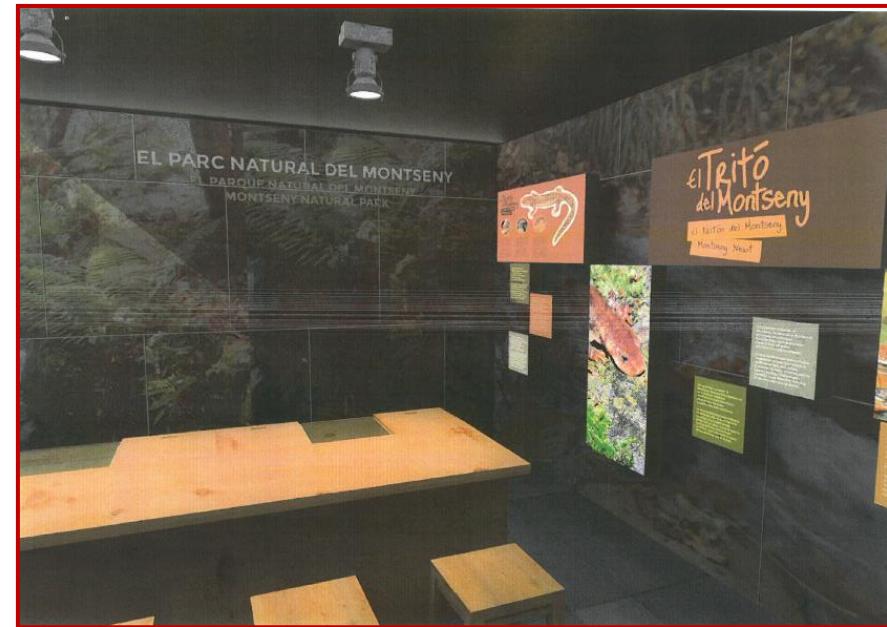
Barcelona Zoo Interpretation Center



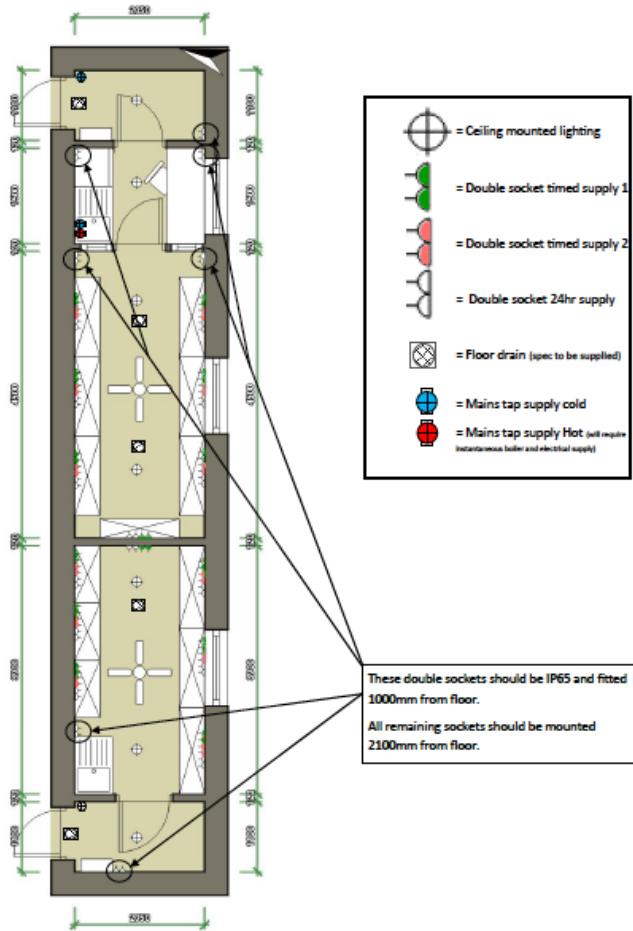








Ex situ component Chester Zoo







C26
C27
C28
C29
C30
C31
pair observed courtship this morning (1/6/17)
pair observed courtship this morning (2/6/17)

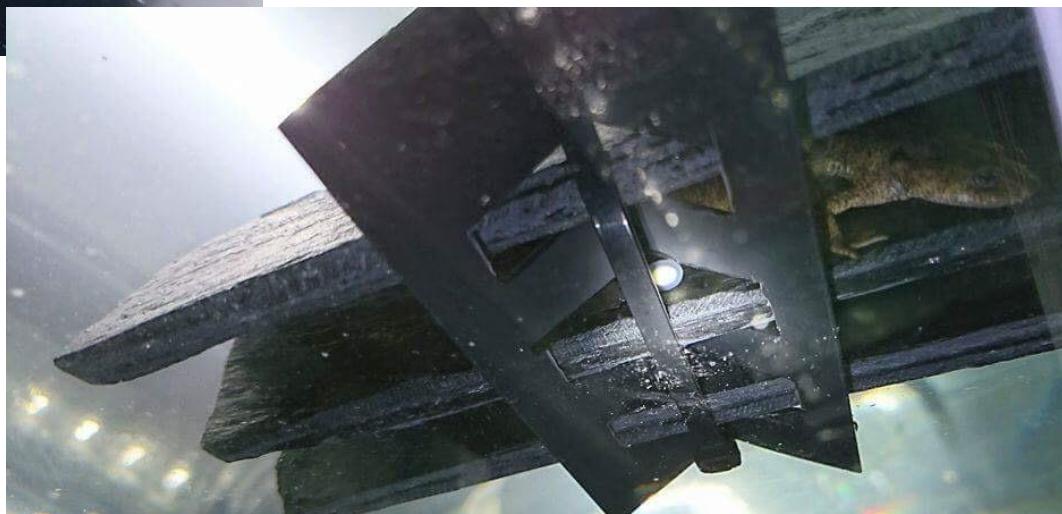
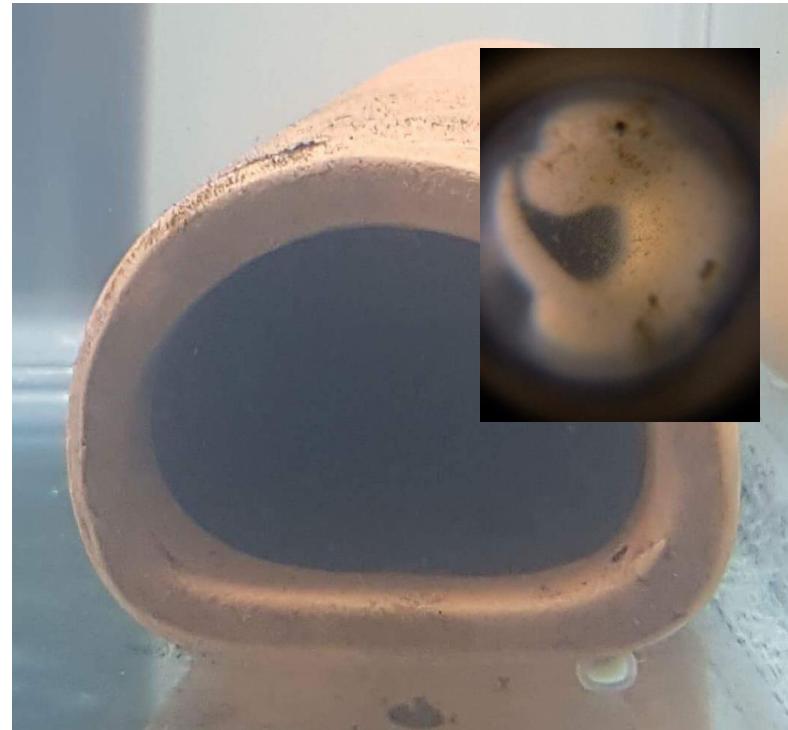
OR73/OR90 → seen mating 10/6/17
→ seen mating 11/6/17

OR150 → Seen mating 13/6
CL107 → 29/6 laid 4 eggs!
OR125 → Gravid? → 29/6 laid 4 eggs!
removal 26/6/17

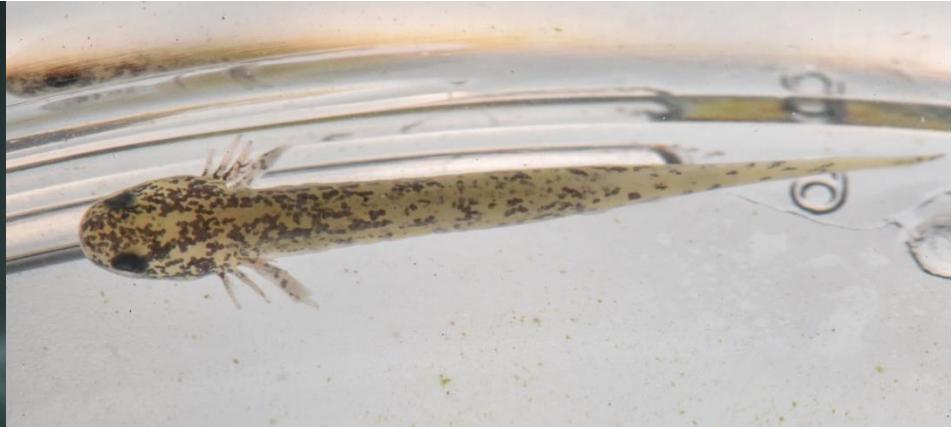
Rack 1		Rack 2	
Box #	Reproductive Status	Box #	Reproductive Status
1	6	4	6
2	5	5	5
3	6	6	6
4	C25	7	C25
5	C25	8	C25
10	C25	11	C25
11	C27	12	C27
12	C27	13	C27
13	C27	14	C27
14	C27	15	C27







Ex situ component Chester Zoo



11.10 adult newts held.

Reproduction already taken place.

Produced 13 individuals since 2017

Meeting of Partners August 2018



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In The Field



- Visit to Natural and re release populations.
- Visit sites of habitat modification to restore streams.



Research : Sperm

- In progress: analysis of the sperm quality
- Detected anomalies on sperm but seems to completely affect fertility
- Detected motility in spermatzoa too



Outcomes



- Approval to begin trials of cleaning live foods for use in bio-secure facilities.
- Investigate further husbandry actions to improve fertility and body condition of adult newts. Predominantly diet and lighting.
- Transfer population management to ZIMS
- Produce Best Practice Guidelines
- Begin trials of producing clean live foods for feeding larvae whilst maintaining biosecurity
- Start new species breeding colonies as trials for live food (*Daphnia*, *Hyalella sp*, *Enchytraeus albidus* ...)
- Investigate potential of varying water level as seasonal cycle as with temperature.

Raising awareness and Education



NUEVOS DATOS SOBRE UN ENDENIMISMO HALLADO HACE POCOS AÑOS

Tritón del Montseny: el anfibio más amenazado de Europa occidental



Descrito para la ciencia en 2005, el tritón del Montseny es el anfibio más amenazado de Europa occidental. Para este endemismo del macizo catalán que da su nombre se desarrolla un programa que pretende asegurar la supervivencia de una especie dulcita para el mundo largo tiempo en unos pocos y recordatos terrenos. Las primeras elaboraciones de ejemplares crías en cautividad ya se han producido.

por Félix Arnal, Francesc Colleret, Salvador Carreras y Daniel Gilabert

Dos crías de Tritón del Montseny nacidas en cautividad en el año 2012. Se trata de un anfibio endémico del macizo montsenyense, amenazado a nivel mundial.

Los anfibios son el grupo de vertebrados más amenazado del planeta. Los principales riesgos son las alteraciones ambientales y montañeñas, tienen un área de distribución muy pequeña y su población es exclusiva de determinados micro-habitats con unas condiciones ambientales muy particulares.

En el año 2005, se descubrió que el tritón del Montseny era una especie completamente nueva y genéticamente de esta particular población. Es la única especie de tritón que existe en Cataluña y por lo tanto, es la única que existe en Europa, al tritón del Montseny (*Catolomus amadei*) (1).

En 1979, el naturalista Martí Boada detectó unos estragos fitos en un torrente del macizo del Montseny. Algunos años más tarde se descubrió que se trataba de los restos de uno de los dos anfibios más amenazados de Europa, juntamente con el rana endémica de la Europa griega de Karpasia.

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Introducción

Consejos para el cuidado del Tritón del Montseny

Text: Manel Aresté i Gargallo | Fotografías: Zoo de Barcelona

Conserving the Catalan newt



CONSERVING THE CATALAN NEWT

Surviving in only a few Catalan mountain streams, the Montseny brook newt is in such desperate trouble that the fight to save it has just gone international

World Water Day

In the rugged and 7,700-hectare Montseny mountain range of Catalonia, a tiny, endemic species of newt, the Montseny brook newt (*Triturus m. montsenyi*), is on the brink of extinction. Now, thanks to an international programme, hope has returned.

The newt is the last of three native newts in the region. It's the most vulnerable because its habitat is so limited. In the last 20 years, almost half of the streams where they used to live have dried up due to climate change, overgrazing, and pollution. Now, there are fewer than 100 individuals left.

Now, thanks to an international programme, hope has returned. The programme, which began in 2008, aims to increase the number of newts by 2020. It's been developed by researchers at the University of Valencia and the Spanish Ministry of Environment and Climate Change, along with the World Wide Fund for Nature and the Zoological Society of London.

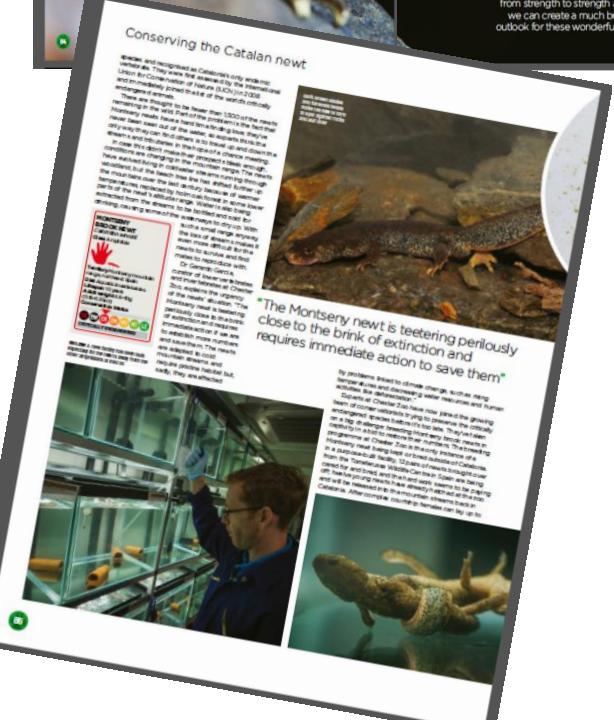
The programme involves capturing and breeding newts in captivity, then releasing them back into the wild. This is a delicate process, as newts are very sensitive to their environment. They must be handled carefully and released back into their natural habitat.

"The Montseny newt is teetering perilously close to the brink of extinction and requires immediate action to save them," says Dr. Oriol Segura, a researcher at the University of Valencia. "We must take urgent measures to protect their habitat and increase their population."

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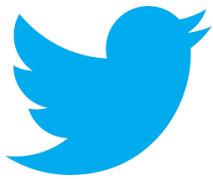
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LifeTritóMontseny @LifeTrito · Sep 18
A les portes de la tardor, arriba l'exposició del #LifeTritoMontseny al Centre d'informació Can Casades. Es pot visitar fins al 5 de novembre de dilluns a diumenge de 10 a 14 i de 15 a 16:30 h. Aproveu per visitar-la i conèixer una mica més el projecte bit.ly/2NkguVb

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Societat Catalana d'Her...

First signs of released newts breeding in the wild!

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LifeTritóMontseny @LifeTrito · Jun 21

Detectada la primera larva procedent d'exemplars alliberats dels centres de cria. Vista en un dels torrents on es van alliberar exemplars per augmentar la zona de distribució. Aquesta descoberta confirma l'adaptació del tritó i és un gran èxit pel projecte #LifeTritóMontseny

Translate Tweet



RB Montseny, Diputació de Barcelona, Diputació de Girona and 4 others

46 106

Retweeted by Medi ambient @mediambientcat · Jun 19

Sabeu que els tritons del Montseny ponen els ous entre les esquerdes de les

Life Tritó Montseny

medi ambient

Retweeted by LifeTritóMontseny · Jun 21

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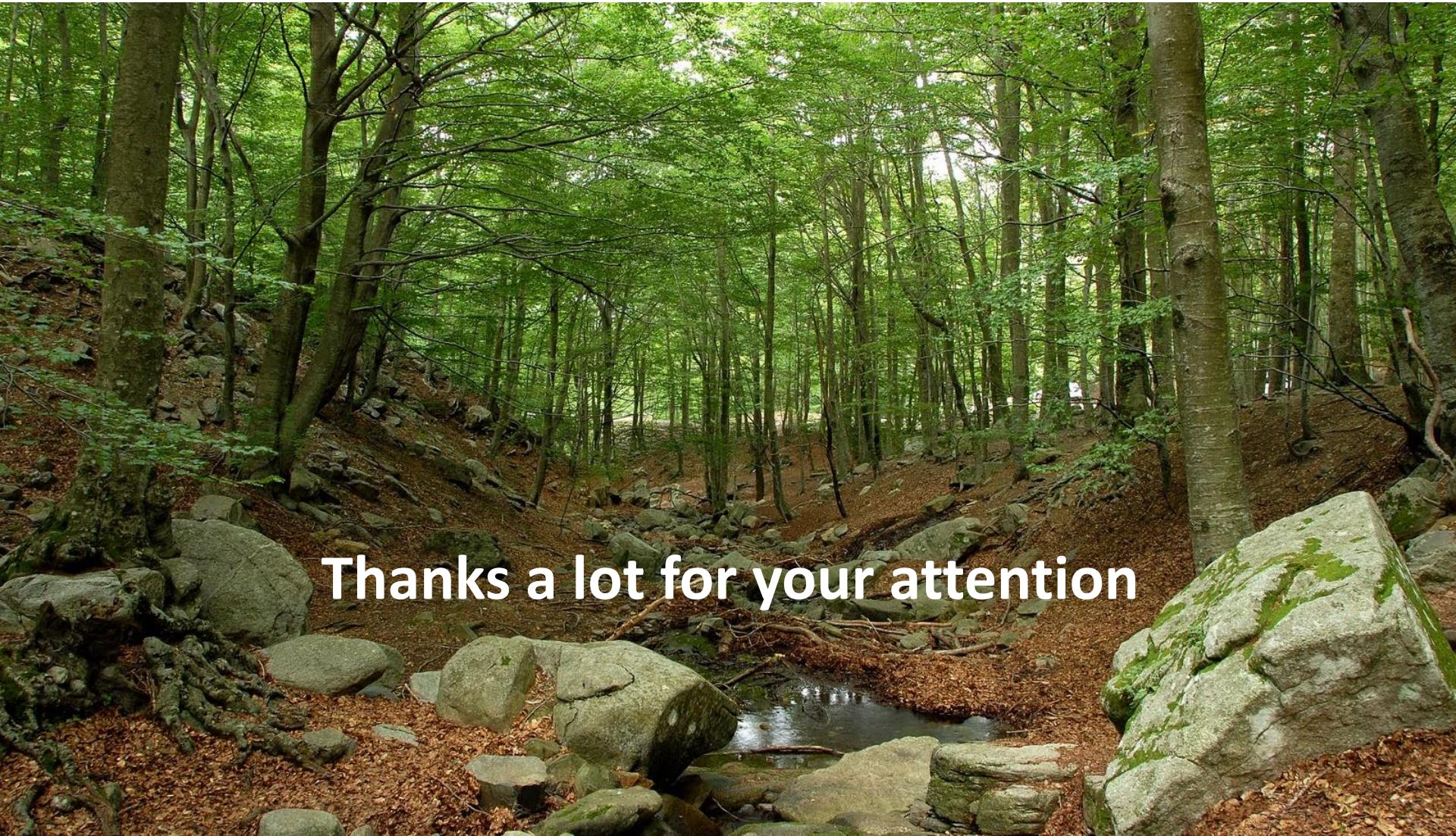
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Thanks a lot for your attention