

Preliminary results of the Amphibia project:

inventory, creation, restoration and monitoring of ponds for amphibians on the southeastern Iberian Peninsula

Paz Parrondo Celdrán
ASOCIACIÓN COLUMBARES
C/Adrián Viudes nº 9. 30570. Murcia - Spain
ramblas@columbares.org

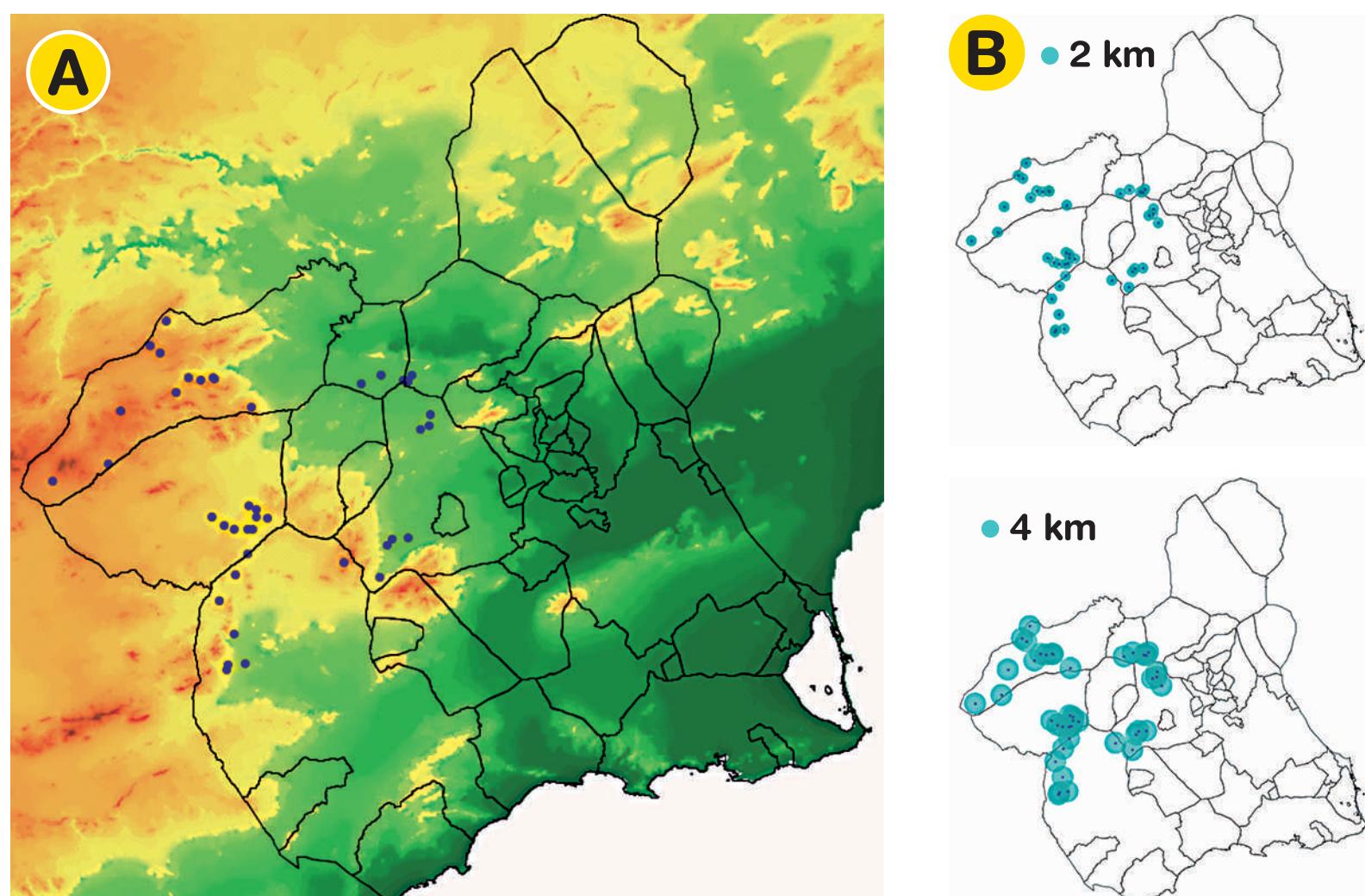
David Verdiell Cubedo

Departamento de Zoología y Antropología Física.
Facultad de Biología. UNIVERSIDAD DE MURCIA
30100. Murcia - Spain - verdiell@um.es

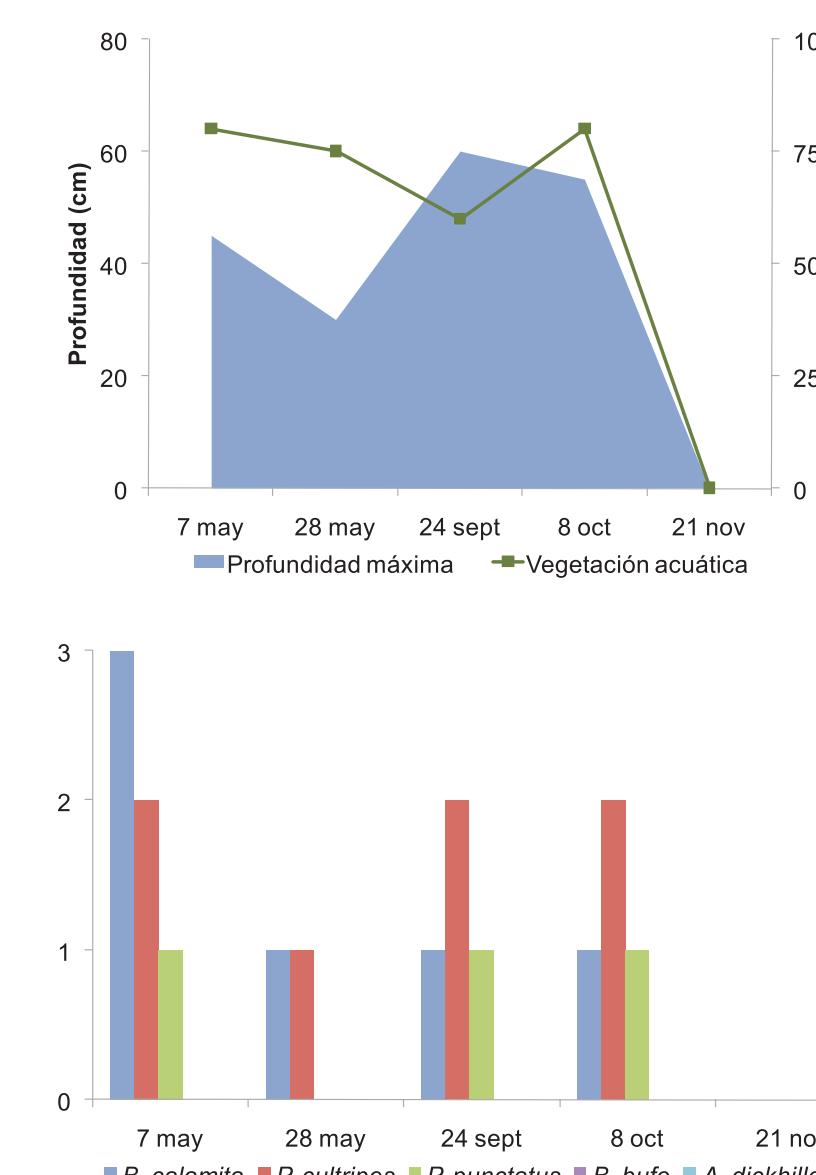
Eduardo Escoriza Abril

Asociación Herpetológica Murciana (AHEMUR)
C/Redón nº 8, 3ºC. 30800. Lorca - Spain
eduescoriza@gmail.com

INVENTORY AND MONITORING OF PONDS



A A total of 45 ponds were inventoried during phase 1 of the project (study area: northwest of Murcia Region). Characterisation of threats and species presence was carried out in each site. **B** An analysis of pond connectivity (influence area at different lineal distances) was performed to evaluate the degree of isolation among ponds and among the different geographical areas. **C** Location of ponds was superimposed on the Ecological Corridors Network to determine priority areas for the possibly upcoming restoration actions.



Biological and environmental monitorization was carried out in a total of 10 selected ponds. The relative abundance of larvae, water depth and aquatic macrophytes cover, among other parameters, were recorded in each sampling period. Five species of amphibians were detected and they predominantly showed a good conservation status in the study area.



RESTORATION AND CREATION OF PONDS

Restoration and adecuation works have been carried out in a total of 11 sites, and 7 new ponds were created. Some of the implemented actions are provided below:



Recovery of a temporary farm pond in the Llanos del Cagítán site. Actions consisted in selective dredging and restoration of the catchment area and waterways. The amphibian species benefited were *Pelobates cultripes*, *Bufo calamita* and *Pelodytes punctatus*.



Restoration of a pond in the Fuente Atocha site. Actions consisted in creation of exit ramps, elimination of exotic fish species and creation of shallow temporary ponds. The amphibian species benefited were *Pelobates cultripes*, *Bufo bufo*, *Bufo calamita* and *Pelodytes punctatus*.



Restoration of a trough in the Fuente Molejón site. Actions consisted in elimination of water leaks, improvement of water inputs, revegetation of the surrounding area and creation of a new pond. The amphibian species benefited were *Salamandra salamandra*, *Bufo bufo* and *Alytes dickhilleni*.



Creation of a shallow pond in the Sierra de Los Álamos site. The amphibian species benefited were *Salamandra salamandra*, *Bufo bufo*, *Bufo calamita* and *Alytes dickhilleni*.

AWARENESS RAISING AND DISSEMINATION

A total of two workshops. Some of the implemented actions are provided below:



Organisation of workshops and guided field trips.



Talks and exhibitions for children in schools.



Public conferences or oral presentations.



Publication of awareness material and the amphibians guide book: *Guía de los anfibios del sureste ibérico*.



Collaboration with nonprofit conservation partnerships.