

Monitoring biodiversity using volunteers? A lizard experience from NE Spain

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Site behind a Mediterranean touristic beach, “Els Muntanyans” is a coastal protected area from NE Iberia which includes a narrow strip of natural dunes and marshes. This minute space (35 ha) harbours an isolate of the thermophile lacertid *Acanthodactylus erythrurus*, outlying the north-westernmost border of its range. The extreme vulnerability of both the area and the species advised for the development of a monitoring plan for: 1) determining the natural fluctuations of the population, 2) detecting and/or anticipating tendencies recording the variables associated with them and 3) orienting and evaluating corrective measures.

Since 2000, teams of volunteers were trained to perform normalised transects scanning the whole area. Species (*Psammodromus algirus* and *Podarcis liolepis* also occur), size class (adult/immature), habitat type and sampling sector were recorded. Transects were carried out before (April-June) and after (September-October) summer draught controlling for meteorological conditions.

The results of seven years of monitoring (2000-2006) indicate stability of the (adult) population and annual variation in recruitment. The distribution is, nevertheless, heterogeneous by habitats and sector. *A. erythrurus* mainly uses the fixed dunes and dune backs and is rarely observed on the artificial substrates where *P. liolepis* is the most frequent. Some buildings in the middle of the area, as well as the wood walking passes lying on the sand, caused habitat disturbance and microfragmentation. Based on the monitoring results, the removal of some wooden passes proved to be a successful measure for increasing local connectivity. The contribution of volunteers was crucial and the experience can be extended to other activities in conservation biology of lizards.