

New contributions on amphibians and reptiles distribution on the Gran Bilbao coast, Biscay (Spain) during the decade of 1970-80

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RESUMEN: Se revisan los especímenes de anfibios y reptiles depositados en la colección científica de la Estación Biológica de Doñana (CSIC, Sevilla) procedentes de la región del Gran Bilbao (Vizcaya) durante la década de 1970-80. Se completan así los muestreos realizados en seis cuadrículas (UTM 10x10 km), y se proporcionan nuevos datos sobre 11 taxones (seis de anfibios y cinco de reptiles), cuatro de ellos en cuadrículas donde hasta el momento no habían sido registrados.

If anyone wants to access to Gorrondatxe beach (also known locally as Azkorri), it is easy nowadays: there is a narrow-paved road that takes you almost until the sand. However, at the beginning of the 1970's this was not the case. Anyone who would want to access this natural area had to use a dirty track, or a shorter way taking the risk of descending the cliff by using a steep path. Young and enthusiastic naturalist apprentices used to find a reward in the risk, because once on the beach, under the rocks there were easy to find different species of reptiles and amphibians. Our mistake was not to write down these data, and just rely in our memory to keep the journal of field samplings. This was not the only beach of Biscay visited by these young naturalists, which also visited for herpetological sampling the nearby Arrigúnaga, Tunelboca, and Barinatxe (also known locally as La Salvaje, in Sopela-Getxo), although no data or specimens of these localities were preserved.

Some of these observations were precociously collected in a small book (Miró, 1976), but with very few and scattered distribution data. However, some of those specimens were sent to Dr Javier Castroviejo, director of the Doñana

Biological Station (EBD, Seville) in that time, to be incorporated in the growing herpetological collection of this institution. A decade later, a much more comprehensive and detailed publication filled the lack of knowledge on herps of this region (Bea, 1985). In 2002, the *Atlas y Libro Rojo de los Anfibios y Reptiles de España* (Pleguezuelos *et al.*, 2002) supposed a new and complete contribution, and since then the SIARE program of "Asociación Herpetológica Española" has kept the information updated.

In this note, we revise the specimens from this area in the EBD collection, in order to fill possible gaps in past distribution, and we provide unpublished data about these taxa in the Gran Bilbao (Biscay) during the 1970 decade. Some specimens were classified under a wrong or obsolete nomenclature, being all specimens analysed and re-identified. The species included in this review are *Alytes obstetricans*, *Epidalea calamita*, *Bufo spinosus*, *Salamandra salamandra*, *Triturus marmoratus*, *Lissotriton helveticus*, *Podarcis muralis*, *Lacerta bilineata*, *Anguis fragilis*, *Chalcides striatus* and *Vipera seoanei*.

The results by species are distributed in six 10x10 km UTM grids (Figure 1). The loca-



Figure 1: A sample of the specimens revised in the EBD collection with a map of the revised 10x10 km UTM grids. a) *A. obstetricans*; b) *E. calamita*; c) *B. spinosus*; d) *S. salamandra*; e) *T. marmoratus*; f) *L. helveticus*; g) *P. muralis*; h) *L. bilineata*; i) *A. fragilis*; j) *C. striatus*; k) *V. seoanei*.

Figura 1: Una muestra de los ejemplares revisados en la colección EBD, con mapa de las cuadrículas UTM 10x10 km revisadas. a) *A. obstetricans*; b) *E. calamita*; c) *B. spinosus*; d) *S. salamandra*; e) *T. marmoratus*; f) *L. helveticus*; g) *P. muralis*; h) *L. bilineata*; i) *A. fragilis*; j) *C. striatus*; k) *V. seoanei*. Fotos: J.F. Beltrán & E.J. Rodríguez-Rodríguez.

tions mentioned as already known are extracted from SIARE (2019) and Pleguezuelos *et al.* (2002), San Sebastián *et al.* (2007), and Gosá (1987). When we mention Algorta as a location, we are referring to a wide area around the current Julio Caro Baroja IES (Secondary Education Institute), including the Gobelas river, and some other tributary creeks such as Sarri and Kandelu.

- *A. obstetricans*: Three specimens in 30TVP90 (10x10 km UTM), one from Algorta (1975) and two from Gorrondatxe beach area (1974). There is no previously published data for this species in this grid. In addition, one specimen from “Camino del Agua” in Barakaldo (30TVN98).

- *E. calamita*: Four specimens (EBD34793H, EBD34794H, EBD34795H and EBD34796H) in 30TVP90, one from Algorta (1975) and three from Gorrondatxe

beach (1973-1974). This species is poorly distributed around the Basque coast but this grid is one of the few already registered in the coast (San Sebastián *et al.*, 2007; Garin-Barrio *et al.*, 2014). It seems this species has been restricted to the surroundings of Gorrondatxe at least since 1970.

- *B. spinosus*: One specimen in Fadura, 30TWN09 (1973). This is a well-known locality. The specimen was classified under old taxonomy as *Bufo bufo*.

- *S. salamandra fastuosa*: Seven specimens (EBD33111) in Algorta, 30TVP90 (1975). The presence in this grid is not recorded previously, although the species is present in several neighbouring grids.

- *T. marmoratus*: Four individuals (EBD33760, EBD33756, EBD33759, EBD33739) for 30TVP90, in Algorta (1974-1976). Grid previously known. It seems this

species was present in the Coast of Algorta-Getxo in the 1970 decade, but no today.

- *L. helveticus*: Four individuals (two for EBD33634 and two for EBD33663) in 30TVP90, from Algorta (1974-1975). Grid previously recorded.

- *P. muralis*: Five individuals (EBD34798H, EBD34799H, EBD34800H, EBD34801H, EBD34802H) for 30TWN09, in Barakaldo (1978) and eight individuals (EBD34803H, EBD34804H, EBD34805H, EBD34806H, EBD34807H, EBD34808H, EBD34809H, EBD34810H) from Algorta, 30TVP90 (1974-1975). This last coastal grid is not registered in SIARE (2019) but it appears in Gosá (1987).

- *L. bilineata*: Two individuals (EBD10214 and EBD28895) in 30TWN09 (previously registered), from San Bartolomé and Leioa (1976 and 1978). One individual (EBD28897) previously unregistered in 30TVP90, from Algorta (1974).

- *A. fragilis*: One individual (EBD10364H) in 30TWN08 (previously known), from Peñas Blancas, Barakaldo (1977). Three individuals (EBD34813H, EBD34814H, EBD34815H) in 30TVP90 (previously known), two from Algorta and one from Azkorri (1973-1975). Two individuals (EBD10339, EBD10365) in 30TWN09 (previously known) from 1978.

- *C. striatus*: One specimen (EBD023418) in Algorta, 30TVP90 (1974). Previously classified as *Chalcides chalcides*. This locality is currently known (SIARE, 2019).

- *V. seoanei*: One specimen (EBD31369) in 30TWN08, from Peña Blanca, Barakaldo (1977), previously classified as *Vipera berus*. This grid is not previously recorded, although there are several known grids around it.

As a conclusion, several of the specimens are from already known grids (SIARE, 2019; Ple-guezuelos *et al.*, 2002; Gosá, 1987; San Sebastián *et al.*,

2007; Garin-Barrio *et al.*, 2014), and the rest come from localities next to grids with known presences, but found in new, although historical, grids (this is the case of *A. obstetricans*, *S. salamandra* and *L. bilineata* in VP90, and *V. seoanei* in WN08). However, we consider this information important for several reasons. First, it is valuable as historical data for a currently very populated and transformed area. This change is evident when comparing orthoimages from 1973-1986 ('vuelo interministerial') vs 2016 (www.ign.es/web/comparador.pnoa). It would be interesting to determine if these new documented grids are due to an actual gap of information or a consequence of population disappearance. In fact, several of these populations are threatened due to habitat destruction, especially in the metropolitan areas like Algorta (including the locations of Vega de Berango, Iturgitxi or Arrigúnaga) and coast (Gorron-datxe beach; Garin-Barrio *et al.*, 2014). However, the urbanization of the area seems not to be the only factor for the disappearance of some populations of species like *T. marmoratus* or *S. salamandra*, since no urbanized areas occur in the grids here mentioned. Among other causes of disappearance or rarification could be water pollution or isolation but these factors must be investigated. Of particular interest are small streams like the mentioned Sarri, Kandelu, and surrounding areas, which could have acted as refuge for some herpetological fauna (G. Morcillo, personal communication). It is important to mention the delicate status of *E. calamita* in the coastal area of Biscay, with an isolated population around Gorron-datxe (San Sebastián, 2007; Garin-Barrio *et al.*, 2014) since 1973, when an individual (EBD34795H) was collected. In addition, we want to remark the importance of scientific collections as field data reservoir. In this case, we have been able

to recover useful information from a time in which personal photo cameras were not as common as today. Revision of past data from scientific collections is today a powerful tool to understand the changes from the past, as well as to register and document the present.

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