

AN ANNOTATED CHECKLIST AND KEY TO THE SAUROFAUNA  
OF SOUTHEASTERN AND CENTRAL SPAIN

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This article was prepared as a hand-list for use in the field, when the author had the opportunity to spend a few days in southeastern Spain. It is primarily based on the checklist of Europe by Mertens and Wermuth (1960). The region covered by the present synopsis is delineated in Fig. 1. General literature on the region includes Hellmich (1956, 1962), Klemmer (1963), Mertens (1925), and Pasteur and Bons (1960).

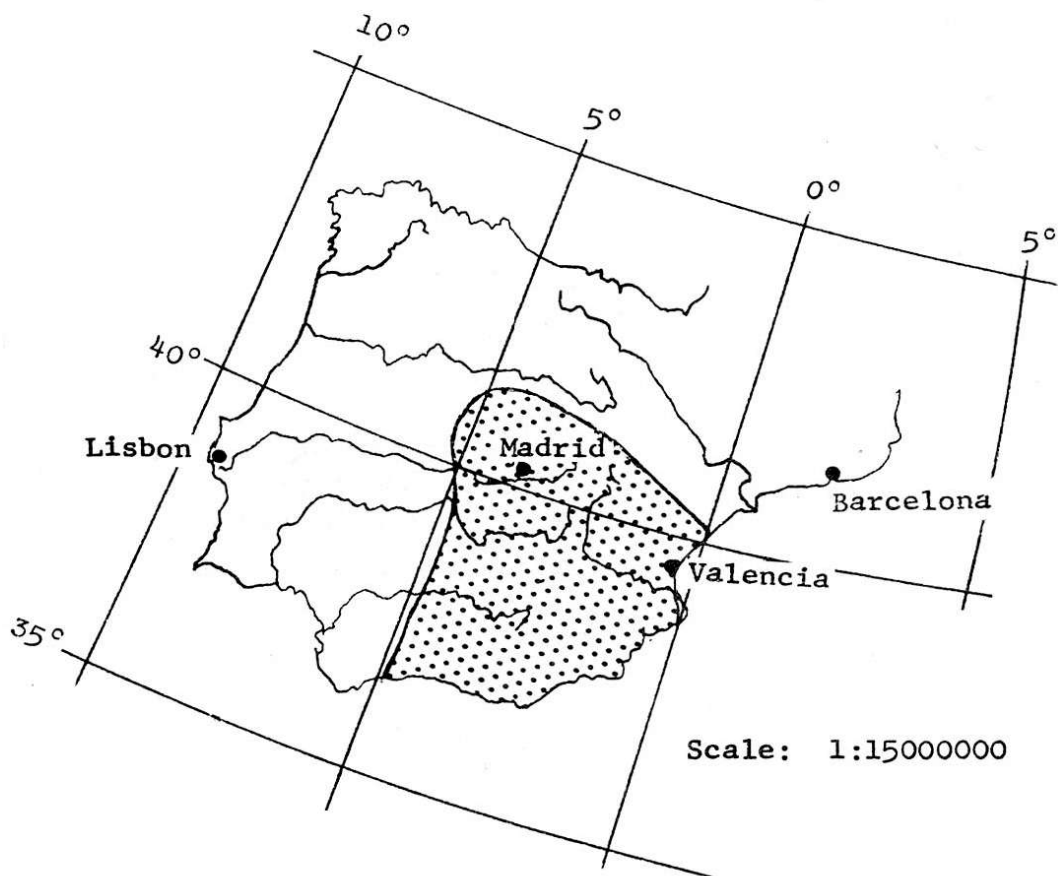


fig. 1 Map of Spain depicting the region under study.

## Annotated Checklist to the Saurofauna of Southeastern and Central Spain

## Anguidae

*Anguis f. fragilis* (LINNAEUS), 1758

Type locality: Sweden

## Chamaeleonidae

*Chamaeleo c. chamaeleon* (LINNAEUS), 1758

Type locality restricted by Mertens and Müller (1928): North Africa

The chamaeleon is said to be very rare in southern Spain and therefore should not be collected.

## Geckonidae

*Hemidactylus t. turcicus* (LINNAEUS), 1758

Type locality restricted by Schmidt (1953): Asian Turkey

*Tarentola m. mauritanica* (LINNAEUS), 1758

Type locality: Mauritania

An adult specimen typical of this Mediterranean gecko was found on a rock near the footpath from the lookout to the old harbour, Benidorm; it was taking a sunbath early in the morning.

## Lacertidae

This family, contributing the major element of the European saurofauna, is poorly known despite all of the efforts of European herpetologists and the tens of thousands of specimens amassed in museum collections. Since Boulenger (1920/1921) no one has undertaken the time consuming and painstaking job to attempt a revision of a larger subspecies, or species complex; the outstanding exception is the very few, however, who did not deal with the Spanish lizards such as Broadley (1972), Darevsky (1967), Eisentraut (1949), Lantz (1928/1930), and Peters (1962).

This chaotic situation, especially in the genera *Lacerta* and *Eremias* and their close allies, is reflected by our current knowledge of the Spanish forms; e.g. we know neither the number of wall lizard species nor their variation at the subspecific level. Therefore it is deemed necessary to give all names assigned to *Lacerta hispanica* in the region, although many are considered synonyms.

Genus *Acanthodactylus*

*Acanthodactylus e. erythrurus* (SCHINZ), 1833

Type locality: Spain

Genus *Algyroides*

All Spanish forms in this genus are rare. Their occurrence is sporadic, as they all require a high air-humidity. This is-

olation of populations effects subspecific diversity, which, due to the scarcity of specimens, is unknown. See Buchholz (1964) and Klemmer (1960) for additional data.

*Algyroides hildagoi* BOSCA, 1916

Type locality: San Ildefonso, 1192 m elev., Sierra de Guadarama, central Spain

Known only from the holotype, which apparently has been lost.

*Algyroides m.marchi* VALVERDE, 1958

Type locality: Piedro de Aguamula, Sierra de Cazorla, Province of Jaén

*Algyroides marchi niethammeri* BUCHHOLZ, 1964

Type locality: near the mountain pass (1480 m elev.) at ca. 1430 m elev., road from Alcaráz to Riópar, Sierra de Agua, Province of Jaén, southeastern Spain

Known only from the holotype.

Genus *Lacerta*

Additional data on the systematics of this group can be found in Buchholz (1963), Cyrén (1928, 1934), and Klemmer (1959).

*Lacerta hispanica* STEINDACHNER, 1870

It is not known, whether *Lacerta bocagei* SEOANE, 1844 is a distinct species or represents only a subspecies of *L. hispanica*. If it is indeed distinct on the specific level, a rearrangement of other subspecies, which are currently defined as *L. hispanica*, is warranted.

A female specimen, nearly 6 cm snout-vent length, from Isla de Benidorm (the island opposite to the famous hotel - town of Benidorm), and its habitat are depicted in the photos (figs. 2, 3, 4). The island is densely populated with lizards, whereas they are shy and very rare on the mainland (sight records exist from the mountains east of Playa Levante, Benidorm).

*Lacerta h. hispanica* STEINDACHNER, 1870

Type locality restricted by Mertens and Müller (1928): Monte Agudo near Murcia, southeastern Spain

*Lacerta muralis steindachneri* BEDRIAGA, 1886 was made a junior synonym of this race by Mertens and Wermuth (1960), who restricted its type locality to that of the nominate form. Klemmer (1959) was unable to find a single lizard at the type locality.

*Lacerta hispanica liolepis* BOULENGER, 1905

Type locality: town of Valencia, Spain

Described as a variety of *L. muralis*, it was then referred to *L. bocagei*, and later reduced to a junior synonym of the nominate species.

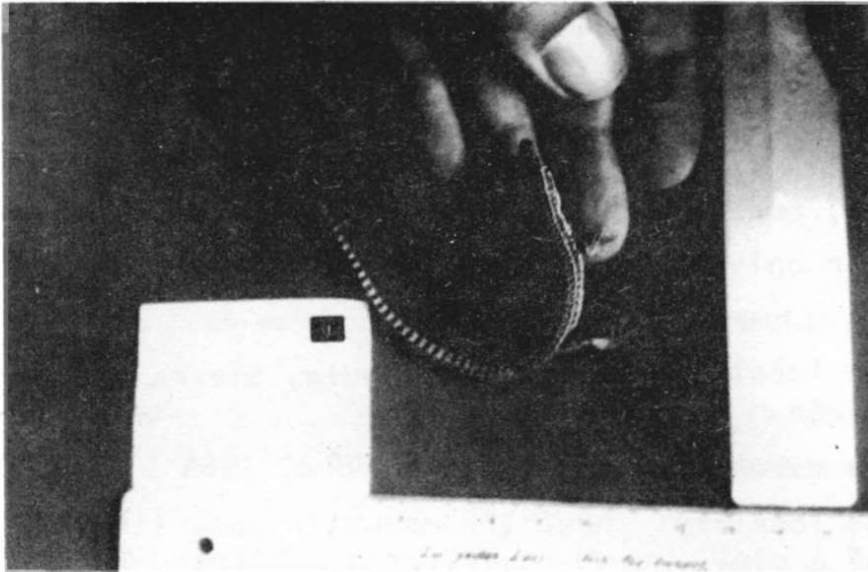


fig. 2 *Lacerta hispanica*, adult female from Isla de Benidorm

*Lacerta hispanica vaucheri* BOULENGER, 1905

Type locality: Tanger, northwest Africa

The lizards in the extreme south of Spain are referred to this race, which is considered valid.

*Lacerta hispanica guadarramae* BOSCA, 1916

Type locality: San Ildefonso, Sierra de Guadarrama, central Spain

This name is tentatively considered a junior synonym of the nominate subspecies.

*Lacerta l. lepida* DAUDIN, 1802

Type locality restricted by Mertens and Wermuth (1960): southern France

*Lacerta lepida nevadensis* BUCHHOLZ, 1963

Type locality: North-slope of the Pico Veleta, between 1600 m and 2100 m elev., Sierra Nevada, south Spain

*Lacerta monticola cyreni* Müller & Hellmich, 1937

Type locality: Puerto de Navacerrada, Sierra de Guadarrama, Spain.

*Lacerta sicula* ssp.

introduced in Almería according to Mertens and Wermuth (1960)

Genus *Psammodromus*

*Psammodromus a. algirus* (LINNAEUS), 1758

Type locality: Mauritania

Ash-gray specimens were observed on the walls and in the gardens of Almería Castle, Almería. Normally the back has a brownish or olive color.

*Psammodromus h. hispanicus* FITZINGER, 1826

Type locality restricted by Mertens and Müller (1928): Southern Spain.

*Psammodromus hispanicus edwardsianus* (DUGES), 1829

Type locality: Southern France

The zone of intergradation between both subspecies is of special interest. Studies in this zone may reveal the distinctiveness of the forms on the specific level.

#### Scincidae

For the systematics of this group see Klausewitz (1954) and Pasteur and Bons (1960).

*Chalcides bedriagai* BOSCA, 1880

Type locality restricted by Mertens and Müller (1928): Dosaguas, Valencia

*Chalcides chalcides striatus* (CUVIER), 1829

Type locality: Southern France

The validity of this form requires further examination.



fig. 3 Lizard habitat on Isla de Benidorm

Artificial Key to the Saurofauna of Southeastern and Central Spain

1. Limbless . . . . . *Anguis f. fragilis*
1. Limbs present . . . . . 2
2. Underside of toes with transversely enlarged lamellae (scansors) . . . . . 3 (*Geckonidae*)
2. Digits in two opposable sets of 2 and 3 . . . . . *Chamaeleo c. chamaeleon*
2. Digits not so, separate . . . . . 4
3. Underside of digits with one row of scansors . . . . . *Tarentola m. mauritanica*
3. Underside of digits with two rows of scansors . . . . . *Hemidactylus t. turcicus*
4. Ventral scales not differentiated . . . . . 5 (*Scincidae*)
4. Ventral scales well differentiated from the dorsals . . . . . 6 (*Lacertidae*)
5. Limbs reduced, each with three digits . . . . . *Chalcides chalcides striatus*
5. Limbs relatively well developed, each with five digits . . . . . *Chalcides bedriagai*
6. Pileus without an occipital; only two supraoculars . . . . . *Acanthodactylus e. erythrurus*
6. Pileus with an occipital; four supraoculars . . . . . 7
7. Dorsal scales large, rhombic, relatively strongly keeled, imbricate . . . . . 8
7. Dorsal scales small, rounded, weakly keeled or not keeled, not imbricate . . . . . 13 (*Lacerta*)
8. Ventral scales squarish; well differentiated collar scales . . . . . 9 (*Algyroides*)
8. Ventral scales rhombic; collar scales discernible only on the sides of the throat . . . . . 11 (*Psammodromus*)
9. Dorsum uniformly brownish with vague dark spots on the vertebral line; dorsals sharply keeled; 17 rows of dorsals around the middle of the body . . . . . *Algyroides hildagoi*
9. Middle of dorsum light brown with sharply defined spots on the vertebral line; sides of the trunk dark brown; dorsals not so sharply keeled; 24 to 31 rows of dorsals around the middle of the body . . . . . 10 (*Algyroides marchi*)
10. 24 to 29 dorsals around the middle of the body; throat whitish or yellow . . . . . *Algyroides m. marchi*
10. 31 dorsals around the middle of the body; throat deep blue (only in adult males?) . . . . . *Algyroides marchi niethammeri*
11. On each side of the back a longitudinal yellow stripe; length of unregenerated tail doubles snout-vent length, which exceeds 7 cm . . . . . *Psammodromus a. algirus*
11. Longitudinal stripes only as juveniles: 4 to 6 of them along the back, composed of light spots; adults uniform or with dark spots; length of unregenerated tail never exceeds double snout-vent length; snout-vent length does not exceed 5 cm . . . . . 12 (*Psammodromus hispanicus*)



- 12. 30 to 34 dorsals around the middle of the body; subocular reaches the mouth; greenish in life . . . *Psammodromus h. hispanicus*
- 12. 34 to 43 dorsals around the middle of the body; one or two small scales separate the subocular from the mouth; not greenish  
 . . . . . *Psammodromus hispanicus edwardsianus*
- 13. Ventral scales like a trapezium  
 . . . . . 14 (*Lacerta lepida*)
- 13. Ventral scales squarish  
 . . . . . 15 (wall lizards)
- 14. 65 to 70 dorsals around the middle of the body; ocellated, black scales irregularly distributed  
 . . . . . *Lacerta l. lepida*
- 14. 76 to 90 dorsals around the middle of the body; ocelli faded, no black scales  
 . . . . . *Lacerta lepida nevadensis*
- 15. Dorsals at least weakly keeled; scales of unregenerated tail in distinct whorls, broad and small ones alternating  
 . . . . . *Lacerta monticola*
- 15. Dorsals not keeled; scales of unregenerated tail in whorls of equal length . . . . . 16
- 16. Underneath uniformly colored, except the outer rows of the ventral scales; differentiated large temporal (massetericum)  
 . . . . . *Lacerta sicula*
- 16. Underneath black spots, at least on the throat; massetericum normally missing . . . . . *Lacerta hispanica*



fig. 4 Isla de Benidorm, seen from the mainland

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