Psammodromus algirus (LINNAEUS, 1758) Large Psammodromus · (Italian name: psammdromo algerino)

Medium-sized lizard, with big and sharpened dorsal and lateral scales, strongly keeled and overlapping. Ventral scales overlapping, but not keeled. Head small, tail very long, collar is absent. Coloration not very variable, brown-bronzed, brown or olive greenish with two white-yellowish stripes on each side, dark bordered. Individuals with nearly uniformly color can be also found. Ventral part whitish but also sometimes greenish. On the flanks, blue ocelli can be also present. Throat and lateral parts of the head orange during the mating season. Total length in adults up to 31 cm. SVL up to 8 cm.

Distribution, zoogeography and taxonomy: Morocco, Algeria, Tunisia and on Galitone and Aguglia Islands (Galite Archipelago); Iberian Peninsula (excepted on the Cantabric coast and some parts of the Pyrenees), and on the islands of Gran Meda and Grossa; southern France, eastward to the Camargue; Italy: only on the Isola dei Conigli close to Lampedusa Island (Pelagie Islands).

P. algirus is found from coastal areas up to 2400 m, in the Moroccan High Atlas, and up to 2340 m in central Spain. In France, at the northern edge of its distribution range, it reaches only 750 m elevation, but mainly it is found below 450 m (GUILLAUME, 1997b). *P.* A Contraction of the contraction

algirus inhabits coastal dunes, dense bushy areas, undergrowth in *Pinus* and *Eucalyptus* forests, high maquis of *Quercus coccifera* and *Q. ilex* (ARNOLD & BURTON, 1978); in Tunisia *P. algirus* is frequently found in *Opuntia* formations (MOSAUER, 1934); on the Isola dei Conigli (4.4 ha, 26 m elevation) in the halo-nitrophilous vegetation dominated by *Atriplex halimus* and other Chenopodiaceae.

Polytypic species. Besides the nominal form, the following subspecies have been described: *nolli* (Fischer, 1887) of Sahara, Algerian and Tunisian mountains; *doriae* (BEDRIAGA, 1866) of Galitone Island (Galite Archipelago, Tunisia). The population of Aguglia Island (Galite Archipelago) might be a new subspecies, similar to ssp. *doriae* (LANZA & BRUZZONE, 1960).

Following BÖHME & CORTI (1993), the low genetic distance observed by BUSACK (1986a) between the North African and the Iberian populations could indicate a rela-

tively recent colonisation of the Old Continent. The progressive spreading of *P. algirus* in Mediterranean France could support this hypothesis. The presence of the Large *Psammodromus* on the Isola dei Conigli has been recorded by ZAVATTARI (1954). This calcareous small island is separated from Lampedusa by a very narrow strait; as the mother island, located at the eastern edge of the Tunisian shelf, it can be geographically considered part of the African continent. The islet was connected to Lampedusa (where *P. algirus* is absent) at least until the Roman Age. There are two hypotheses on the occurrence of *P. algirus* on Isola dei Conigli: i) the introduction by man of North African individuals (LANZA, 1954a; ZAVATTARI, 1954); ii) the disappearance of *P. algirus* on Lampedusa, due to the drastic environmental changes that took place during the 19th century and the contemporaneous presence of two lacertophagous snakes (*Malpolon monspessulanus* and *Macroprotodon cucullatus*) (PADOA SCHIOPPA & MASSA, 2001; CORTI & LO CASCIO, in press).

Biology and ecology: DI PALMA (1984) observed that on Isola dei Conigli, the Large Psammodromus is mainly found in densely covered areas where the lizard hides. The dense vegetation represents optimal refuge against the attacks of potential predators, such as *Falco tinnunculus*, rather active on the islet, even if this lizard has never been found in bird pellets. During summer this lizard is active throughout the day (9.00 a.m.-6.00 p.m.), but activity decreases between 1.00–3.00 p.m.

In central Spain, POLLO & PÉREZ-MELLADO (1989) observed that in summer adult *Psammodromus algirus* show a bi-modal activity pattern, characterized by a pause during the central hours of the day, and an annual activity from March to November. In southern Spain, the lizard is active throughout the year, showing an uni-modal pattern except during summer (SEVA, 1982; PÉREZ-QUINTERO, 2001). SEVA (1982) observed that *P. algirus* is an efficient thermoregulator. Average body temperature 30.9 °C, as observed by PÉREZ-QUINTERO (2001), who also reports that this species combines two thermoregulation patterns according to insolation conditions, showing thigmothermy and heliothermy.

DI PALMA (1984) estimated that the population of the Isola dei Conigli consists of about 2000 individuals, of which the territory varies between 8 and 12 m².

The first study on the feeding ecology was carried out by DI PALMA (1984). Later on in a comparative study the opportunistic behavior and high adaptability to the microinsular environments of the species has been observed (SORCI, 1990). Prevailing prey reported by SORCI (1990) are: Formicidae (26 %), Coleoptera (13.8 %), Heteroptera (11 %) and a relevant quantity of vegetable matter (23.3 %). On the continent the feeding habits change slightly. POLLO & Pérez-Mellado (1988) and Díaz & CARRASCAL (1990) observed in central Spain the consumption of spiders, Hemiptera, Orthoptera and Formicidae, while Coleoptera and vegetable matter were found in small quantities. For some SW Spain coastal populations, the most frequently prey were Coleoptera, Araneae, Formicidae and Diptera; adults mainly feed on Coleoptera, while ju-



Fig. 84: Psammodromus algirus, Azrou, Middle Atlas Mts., Morocco.

R. Sindaco



Fig. 85: Psammodromus algirus, Monfrague National Park, Spain.



Fig. 86: Psammodromus algirus, Catalonia, Spain.

W. Вöнме



Fig. 87: Psammodromus algirus, Banyuls-sur-Mer, France.

R. König



Fig. 88: Isola dei Conigli, near the southern coast of Lampedusa Island, is the only Italian site of *Psammodromus algirus.* P. Lo CASCIO

veniles feed on Formicidae (Pérez-QUINTERO & Rubio-García, 1997). This species can be considered an active forager.

It has been observed that more aggressive juvenile males have larger home ranges; furthermore large home ranges with great amount of vegetation cover positively influence survival (Civantos, 2000).

Mating take place in April–June; 3–11 rounded eggs of 7.3 x 12.4 mm are laid (POLLO & PÉREZ-MELLADO, 1990). In late summer a second deposition can take place.

The Large Psammodromus produces sounds, rarely recorded in lacertids, similar to a squeak related to territorial behavior (BÖHME, 1981), uttered also when the animal is captured.