

## Predation note: *Anthus berthelotii madeirensis* (Passeriformes: Motacillidae) catches *Teira dugesii mauli* (Squamata: Lacertidae) in Deserta Grande, Madeira Archipelago

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**Abstract.** Here we present the first photographic evidence of opportunistic predation of a small passerine, the Berthelot's pipit *Anthus berthelotii madeirensis*, on the Madeiran endemic lizard *Teira dugesii mauli*. The behaviour was observed in Deserta Grande, Madeira, and represents the second record of lizard predation by *A. berthelotii* and the first time this species is observed preying upon *T. dugesii*.

**Keywords.** Lacertidae, Motacillidae, predation, Madeira.

The Madeira wall lizard *Teira dugesii* (Milne-Edwards, 1829) is a medium-size lizard, endemic to the Madeira and Selvagens archipelagos. It can be found on all main islands and islets where it inhabits a wide range of habitats in relatively high densities (Jesus, 2008). According to morphological, enzymatic and genetic studies, four subspecies have been identified: *T. d. dugesii* endemic to Madeira, *T. d. jogeri* endemic to Porto Santo, *T. d. selvagensis* endemic to Selvagens and *T. d. mauli* endemic to Desertas (Mertens, 1938; Bischoff, Oseneegg and Mayer, 1989; Brehm et al., 2003).

Throughout its distribution range, *T. dugesii* is sympatric with the Berthelot's pipit *Anthus berthelotii* Bolle, 1862, a small songbird which breeds on Madeira, Selvagens and Canary archipelagos (Oliveira and Menezes, 2004). This passerine species was thought to feed exclusively on insects and seeds (Cramps, 1998; Illera, Emerson and Richardson, 2007), however, in 2006, a bird was observed preying upon a small *Gallotia atlantica*, a lizard endemic to the Canary Islands

(Rodríguez, Rodríguez and Montelongo, 2007). Other predation events of motacillids upon reptiles have also been observed (e.g.: there is one record of Tawny pipit *Anthus campestris* predation upon a sand lizard *Lacerta agilis*), however, reports on this type of interactions are rare and most species within this group are regarded as exclusive insectivores or both insectivores and granivores (Cramp, 1998; del Hoyo, Elliott and Chistie, 2004).

This note reports the first observation of predation of *T. d. mauli* (Mertens, 1938) by *A. b. madeirensis* (Erlanger, 1899), a Berthelot's pipit subspecies endemic to Madeira. The incident took place in the morning of 23 October 2009 in the vicinity of the Madeira Natural Park wardens' house in Deserta Grande, a small island located about 25 km southeast of Madeira (32°31'5.38"N, 16°30'44.30"W, 12 m asl.). The involved *A. b. madeirensis* was observed picking invertebrates and seeds whilst walking. Suddenly, it started chasing a juvenile *T. d. mauli* which was pecked for about two minutes. After captured, the lizard was adjusted so that the bird could hold it by the head and then beaten repeatedly against the ground (Fig. 1). Once the lizard died, it was swallowed head first (Fig. 2).

On the afternoon of 27 October 2009 an *A. b. madeirensis* was observed again chasing a small *T. d. mauli* just a few meters away from the place where the first hunting event was observed. This time, however, the chase was unsuccessful and despite being pecked several times the lizard was able to escape.

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**Figure 1.** *Anthus berthelotii madeirensis* holding a dead *Teira dugesii maui*.



**Figure 2.** *Anthus berthelotii madeirensis* ingesting a *Teira dugesii maui*.

Although this is the first predation record of *A. berthelotii* upon *T. dugesii*, this interaction may be frequent since both species are widespread and common throughout the Madeira archipelago (Oliveira and Menezes, 2004; Jesus 2008) and we encourage studies on the factors influencing this interaction.

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