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## A contribution to the knowledge of *Darevskia steineri* (EISELT, 1995) habitat at Loveh Waterfall, Northeastern Iran

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### Abstract

During fieldwork on 15 August 2011 in Golestan province, several specimens of *Darevskia steineri* (EISELT, 1995) were found at midday in the vicinity of the Loveh Waterfall. The locality of *Darevskia steineri* is limited to the area around the Loveh waterfall. During this survey, no specimens of *D. steineri* could be found in other parts near to the waterfall, but some reptiles such as *Darevskia chlorogaster* and *Gloydius halys* were found as sympatric with *D. steineri*. The unique habitat of *D. steineri* is now at the risk of destruction due to human activities as well as tourism effects. In addition, the habitat is affected by a gas pipeline that runs through the area west to the province of Semnan.

**Keywords:** *Darevskia steineri*, Habitat destruction, Human activity, Golestan province.

## Introduction

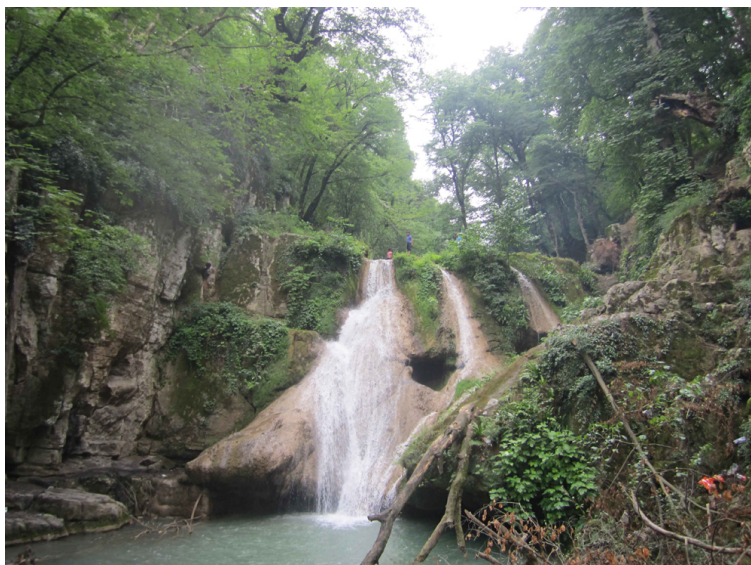
The natural populations of most animal species face some challenges: habitat destruction, climate change and human activity. Most species, especially reptiles, are very sensitive to the destruction of vegetation. Some anthropogenic influences affect the life span of animals. The destruction of habitat can also lead to the extinction of species if they are restricted to a small local area (CHEN & HUI 2009). Ecosystem fragmentation is another reason for the extinction of species, and plant life and vegetation can change the life conditions for animals, especially reptiles. Reptiles have colonized various habitats such as deserts, jungles, gardens, rivers, sand dunes and mountains (SAUNDERS et al. 1991).

The genus *Darevskia* has a widespread range from Iran to the west of Black Sea in Europe. The genus consists of about 26 species, and six of them occur in Iran (ARNOLD et al. 2007, RASTEGAR-POUYANI et al. 2008). *Darevskia steineri* has only been reported from the type locality, the Loveh waterfall in Minoudasht, Golestan province (ANDERSON 1999).

*Darevskia steineri* reaches a snout-vent length of 61–71 mm (average 66 mm) and can be distinguished from the sympatric *D. chlorogaster* by its smooth and slightly concave dorsal scales (whereas *D. chlorogaster* has keeled dorsal scales) and a slender body (EISELT 1995).

## Materials and Methods

During extensive field work in Golestan province, on 15 August 2011, four specimens of *Darevskia steineri* were observed at the type locality (N 37° 20' 53"; E 55° 40' 28"; 655 m), Loveh Waterfall, which is located among dense forests in Minoudasht and Golestan Natural Park in the east of Golestan province (RASTEGAR-POUYANI et al. *in print*). In addition we surveyed the area from the Golestan Natural Park to the vicinity of the city of Gorgan but no further specimens of *D. steineri* were detected. According to ANDERSON (1999) two other species of the genus *Darevskia* are distributed in this area: *Darevskia chlorogaster* and *Darevskia defilippii*. But we were only able to observe *Darevskia chlorogaster*. The Crotalidae *Gloydus halys* was found sympatric with *Darevskia steineri* and inhabited the forest floor while the lizards lived in the vicinity of the waterfall.



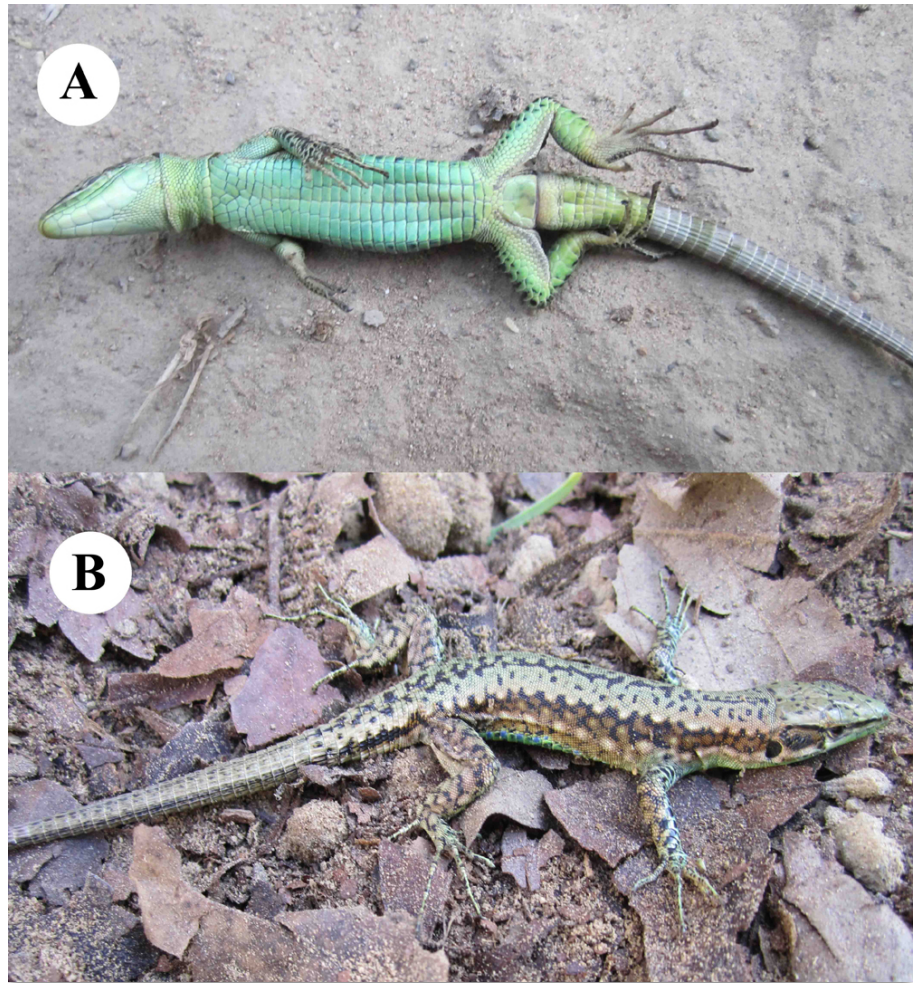
**Figure 1.** Type locality of *Darevskia steineri* at Loveh waterfall, near Minoudasht, Golestan province, Iran. The locality is one of the tourism regions in the north of Iran.

The Hyrcanian forest is situated in the north of Iran. The type locality of *Darevskia chlorogaster* is located in this forest. The vegetation in this area consists of *Quercus castaneifolia* (Fagaceae), *Acer* spp. (Aceraceae), *Alnus serrulata* (Betulaceae), *Philodendron bipinnatifidum* (Araceae), *Rubus fruticosus* (Rosaceae), *Glechoma hederacea* (Lamiaceae) and *Ruscus hurcanus* (Asparagaceae) (GHAHREMAN & ATTAR 2000).

The gas pipeline in this region could be one of the risks to this species. Furthermore the road from Loveh village to Semnan province as well as the tourism in the region have an important impact on species life.



**Figure 2.** *Darevskia steineri* in natural habitat. A) Ventral plates show a green color, are juxtaposed and not overlapping. Collar not serrated. B) Dorsal view of *D. steineri* and its vertebral strip.



## Conclusion

*Darevskia steineri* is endemic to Iran and until till now has only been reported from the type locality. Due to various human destructive activities, this lizard needs more protection to prevent its extinction.

## Acknowledgment

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