

“Conservation of the last surviving lizard population in the Caucasus – the racerunner *Eremias arguta transcaucasica* in Armenia.”

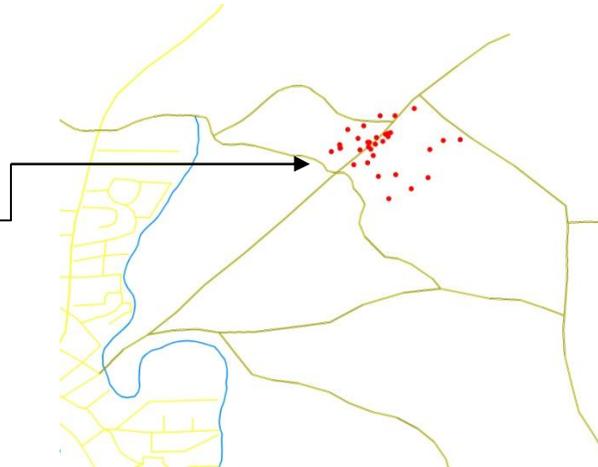
In this project we have been getting the first-hand knowledge on ecology, distribution and abundance of the racerunner *Eremias arguta transcaucasica*. Our preliminary study has shown that abundance of this lizard is high (71.25 individuals/ha) only on a very restricted territory which adjoins to the village Noratuz and is under strong human impact.

Fieldwork was carried out by the principal investigator (Dr. Marine Arakelyan) with field assistants (7 students of Yerevan State University) in September of 2008.

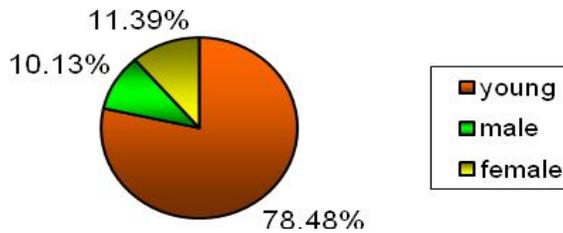
During the census carried out in September 12-15, 2008 we have recorded 85 specimens of *E. arguta* over the area of 0.25 km², with the longest distance between the outer points equal to 620 m. Mean abundance of lizards among 20 random sampling plots (20x20 m) was Mean \pm SE = 2.8 \pm 0.63; R – 0-9.



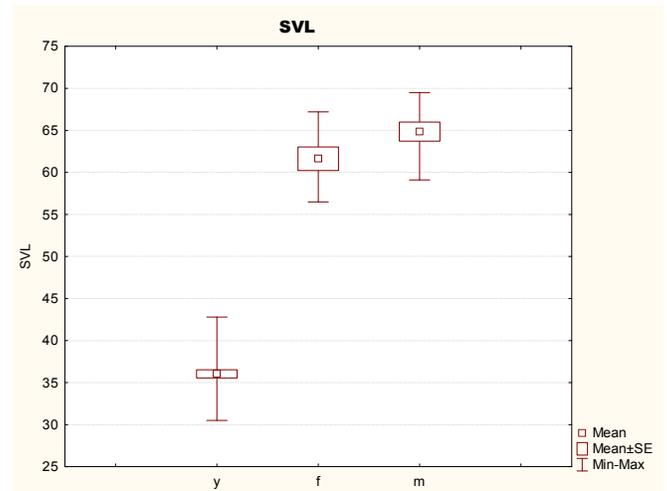
Map of Armenia with location of *E. arguta*



Sampling points of *E. arguta* in vicinity of Noratuz village



Sex/age composition of the *E. arguta* population



The body length (SVL) of young (n=62), females (n=9), and males (n=8)

Samples of vegetation were collected across the sampling plots for identification by Dr. Ilona Stepanyan (Institute of Zoology NAS RA). The following common ephemeral plant species are identified in the steppe vegetation inhabited by lizards: families Asteraceae (*Achillea biebersteinii*, *Artemisia absinthium*, *Carduus nutans*), Lamiaceae (*Teucrium polium*, *Thymus kotschyanus*), Caryophyllaceae (*Diantus cretaceus*), Convolvulaceae (*Convolvulus arvensis*), Fabaceae (*Trifolium dubium*, *Astragalus sp*), Euphorbiaceae (*Euphorbia orientalis*) and Poaceae (*Stipa capillata*, *Bromus tectorum*).

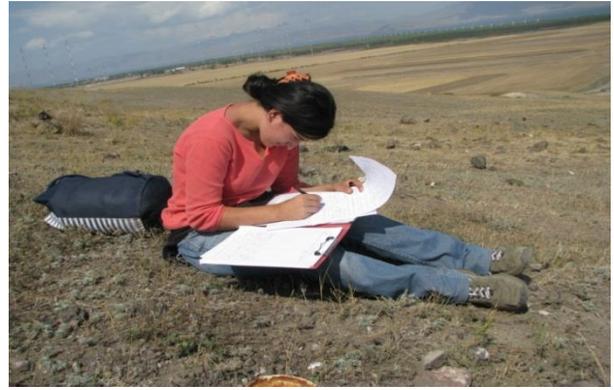
The sympatric species of animals recorded by us are voles (*Microtus spp.*), fox (*Vulpes vulpes*), green toad (*Bufo viridis*) and striped lizard (*Lacerta strigata*).

The main goal of this project is to determine the conservation status and prepare the draft Action Plan for *Eremias arguta transcaucasica* in Armenia. Our preliminary work has demonstrated that its wild population has been affected by different threats and is critically endangered. The patches of remnant habitats are all located among the agricultural lands in close vicinity to the Noratuz village. The main threats detected on this territory are intensive agriculture, stone quarries, livestock overgrazing, road mortality and pressure by synanthropic animals (i.e. those living near people – rats, dogs, cats).

We hope that this project will give a good start-up for efficient conservation of *E. arguta* in Armenia. In this project we trained the young zoology and biology students from Yerevan State University who keep working with us. We have hired a second-year conservation biologist Ms. Anna Vardanyan who participated at the Biological Students Conference (Yerevan, 2-4 March, 2009) with oral presentation “The last population of racerunner *Eremias arguta transcaucasica*”.



1. Delineation of the sampling plot



2. Recording the data



3. Adult and juvenile of *E. arguta*



4. Presentation of preliminary results

We plan to re-start the field surveys in April and continue them until end of July 2009, in parallel with laboratory analysis of data, before preparing the final report to Rufford Small Grants in August 2009.