Project Update: May 2017

Introduction:

Marmaris salamander (*Lyciasalamandra flavimembris*) is an endangered endemic species and found in Northwestern part of Muğla province of Turkey. It is found in natural coniferous forests, within the altitude range of 30-600 m and not in modified habitats. The major threat of Marmaris salamander' population is habitat loss due to forest fires, urbanisation and climate change.

Methodology / approaches

To monitor current population status, the study area was divided 10 km^2 qrids and will be visited during the activity season (November – February) of Marmaris salamanders. After determining distribution of the species, we will select three quadrats (10 x 10 km) from different dominant habitats (e.g. open, scrubs, and forest) and monitor in winter and autumn. In these quadrats, all the individuals will be marked with Visible Implant Elastomer (VIE) and we will use capture-recapture method to obtain data and estimate population size and density. To understand habitat preferences of Lycian salamanders, we will test different variables (in each transects) in the salamander's habitat. These data will be helping us to link between environmental variables and presence and/or abundance of salamanders. To understand reproduction activity, we will observe phenology and breeding season of the individuals in natural habitats and all data recorded properly.

Results

The team has conducted field surveys in Muğla boundaries for determining the distribution of Marmaris salamander (*Lyciasalamandra flavimembris*) between 11-12 and 25-27 March 2017. We tried to detect existence of Marmaris salamander in each grid.

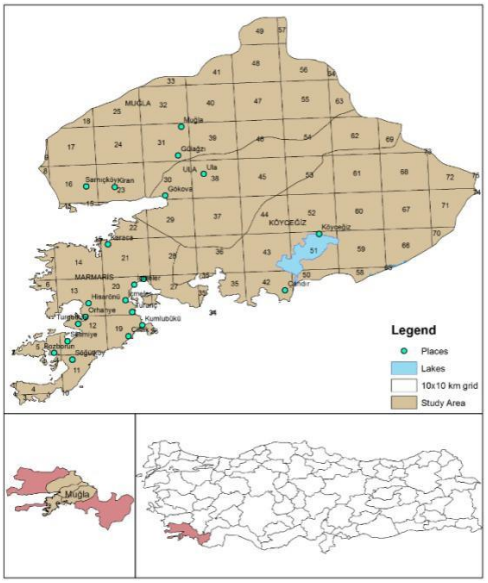
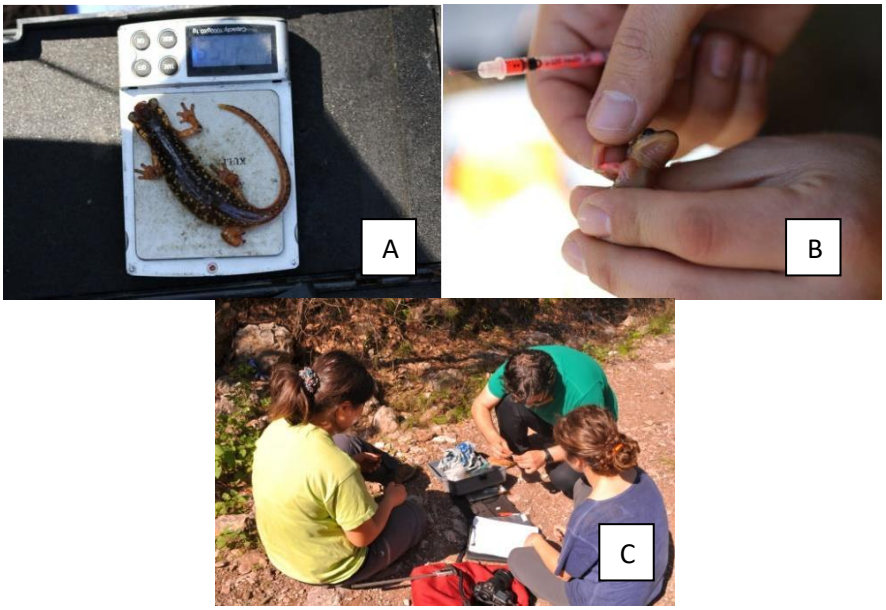


Figure1: A- General view of the study area with UTM grids (10 km^2). B- Location of the study area in Muğla. C- Location of the study area in Turkey.

1- Biological Survey

The controls of the quadrats have almost finished and we chose sampling sites from different habitats. In these sampling sites, we selected three populations in the grids for estimating populations' size and habitat preference. All the observed individuals in these grids were marked with Visible Implant Elastomer (VIE) (Picture 1).



Picture 1: A- Weighing a Marmaris salamander B- A marked Marmaris salamander C-General view of team

During the summer season, salamanders have started to aestivation at beginning of April. Therefore, we have stopped biological survey of study until next activity time.

As a result of our first sight, the species survived in two different habitats (in the natural pine forest and the stony areas with low vegetation cover) (Picture 2).

Picture 2: A- General view of the habitats which is covered with the rock sand stony with low vegetation cover B- General view of natural pine forest.

2- Awareness Study

First we have just start awareness studies for adults in the regions within the distribution area of Marmaris salamander and we have meet with Regional Director of Turkish Republic of Nature Conservation and National Parks and told about our project aims. During the initial site selection field visits, we have also interviewed local people to gather their perspectives about Marmaris salamander. Besides these meetings, we have designed a presentation and t-shirts for 6-10 year-oldstudents and will be meeting next month in the region.

During the upcoming period we continue with the awareness study and continue with the field trips and scientific part of the project.


Picture 3: Some pictures with locals