Project Update: April 2019

Introduction: Marmaris salamander (*Lyciasalamandra flavimembris*) is an endangered endemic amphibian species and found in southwestern Anatolia, Muğla, Turkey. It is found in natural coniferous forests and scrubs within the range of 30-600 m a.s.l. The major threats of Marmaris salamander are habitat loss and destruction due to forest fires, urbanisation and climate change.



Figure 1: General view of a male Marmaris Salamander

Methodology / **approaches:** To monitor populations of Marmaris salamander, the distribution area was divided to 10 x 10 km UTM grids and the randomly selected five sampling sites which has different habitat characteristics (e.g. forest, scrubs) were visited during the activity season (December– February). In these quadrats, we used mark-recapture method to obtain basic population parameters (population size, survival rate, and capture probably). We marked all observed individuals with Visible Implant Elastomer (VIE). We observed phenology and breeding season of the salamanders in natural habitats and all data recorded properly. Besides, we collected some environmental parameters to determine habitat preferences of the salamanders. These results will be helping us to link between environmental variables and presence and/or abundance of salamanders.



Figure 2: The general view of a sampling site from Selimiye, Marmaris.

What we done:

Fieldwork: The team has conducted 25 days field study in 5 sampling sites for estimating population parameters and habitat preference. All the observed individuals were marked via VIE and measured. Now, we are working on data analysis and we will be combined new data with the previous RSF results.



Figure 3: Marmaris salamanders in different sampling sites.

Public awareness: We are continuing awareness-raising activities for adults in the regions within the salamander' distribution area. We have contacted with Regional Director of Turkish Republic of Nature Conservation and National Parks, Marmaris Municipality and presented our results.

We have attended an awareness raising workshop for the children in Marmaris regain organised Marmaris Municipality. In this event, we have played some street games to inform the life cycle of salamander. About 100-200 children were attended the event with their parents and teachers. Besides, we have also interview with locals and discuss about their problems related to livelihood. They stated that they have sold their own lands instead of doing farming, beekeeping or husbandry. We know to protect these habitats against to urbanisation for reducing habitat loss. In this perspective, we are planning to prepare a sustainable economic model report for locals, and we will share with the municipalities in the area. We will emphasize the need to create a campaign to sell the local producer's products.



Figure 3: A local product honey in the region

What we will do:

We are planning to organize second Marmaris Salamander Festival with National Parks. In this festival, we will to introduce salamander together with the Mediterranean monk seal which another endangered animal lives in same region with the supporting of our NGOs (Akdeniz Koruma Derneği).

We finished the filming for documentary. Now, it's under production process. We will continue to meet with locals for increasing public awareness.

At the end of the project we will do a stakeholder meeting to share our results.