

## Reviving Oriental (Anatolian) Sweetgum Forest in Southwestern Turkey

16444-2

### Interim Report II

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- 1. Current Distribution Analysis:** *Insufficient data belong to the sweetgum forest, leads to lack of conservation motivation of forestry departments. Thus, firstly we will collect related forest cover literature from 1800s to now, and analyze how the data is changing. Secondly we will show the changing of the forest cover between 1970-2015 over Turkey with using field trips and remote sensing data. Thirdly we will prepare distribution and corridor maps. Finally we will press a short communication.*

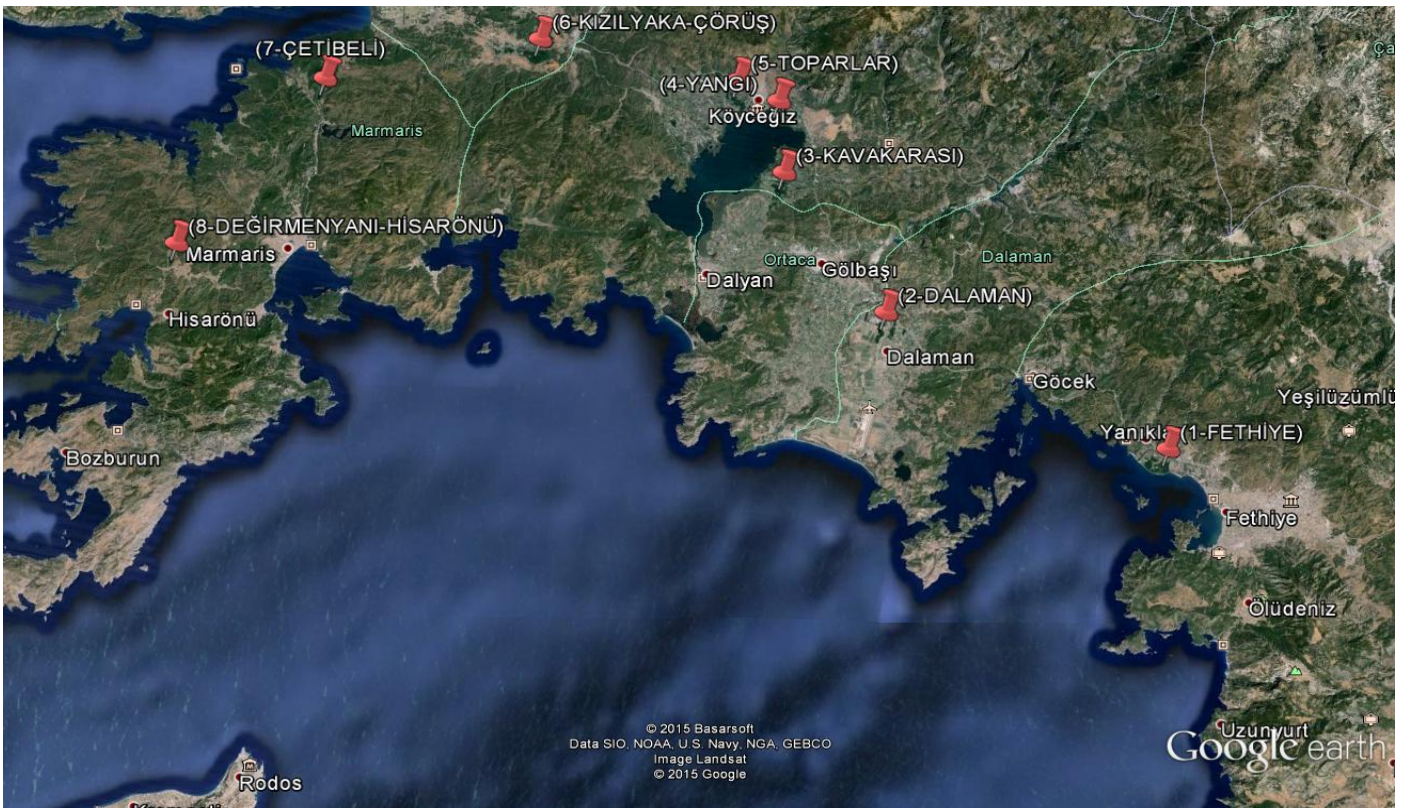
**Progress:** We have started to pre-field trips. Nowadays by using the presence-absence analysis we focus the old eco-geographical studies records which held many years ago. We have listed and mapped the fields to be studied. Our exact field studies will be started in May, 2015 due to the suitable vegetation season for work. Although they are not included in the project budget, we also want to study in Cyprus, Rhodes, Crete and other small islands in Aegean Sea. Until today we've collected related data about those islands' current situations from our colleagues and other related literature.

- 2. Wildlife Research:** *We know that there is a special wildlife inside the forest due to its flooded properties (otter, water vole, jungle cat, caracal etc.), and it must be discovered. Within this scope we are going to focus on these keystone species. When we achieve this aim, we can create a new special value for the forest in the eyes of locals and decision makers. Due to the limited project time, we will use the camera trap methodology. We'll select 8 big forests & coppices along the coastal districts of Mugla Province. Finally we will identify the key wildlife species for the forest and their conservation action plans.*

**Progress:** We have started to wildlife researches inside the sweetgum forests. We already put 8 camera-traps to catch the middle and big sized mammals inside the forests. Also we are working with 30 metal traps for small mammals. We will take satisfactory primary data in next interim but during our camera-trap studies we've recorded otter, wild boar, marten and caracal footprints and feces. Also we saw some amphibian and reptilian species such as *Rana ridibunda*, *Natrix tessellata*, *Emys orbicularis*, *Testudo graeca* etc.



**We have started to wildlife researches inside the Anatolian Sweetgum Forests.**



**We have set up 8 camera-traps into the Anatolian Sweetgum Forests in Southwestern Anatolia.**



**We have recorded some amphibians and reptilians inside the sweetgum forests.**





We also have recorded some mammalian signs during our camera trap studies

3. **Therapy Forest Experiment:** *We will study how and how much Sweetgum Forest will play a role as the therapeutic effects (anti-aging, relaxation, rehabilitation, supporting the mental health etc.). We selected 170 hectares wide sweetgum forest within the border of Fethiye District because of it has suitable research conditions (pure forest, older trees, any saplings, some gaps in the forest etc.). We will reveal the chemical structures of the volatile components of sweetgum tree. We will also research the conditions (contents, intra-day temperature and seasonal changes etc.) of the chemical compounds of sweetgum tree. During those experiments, we will collect sweetgum leaves, oils, barks etc. in different time frames and analyze their volatile components with using some organic chemistry tools.*

**Progress:** We will do field studies in May, June and late September, 2015. Nowadays we are arguing the experiment design, right place, conditions and materials. Also we are collecting the necessary equipments for the experiments.

4. **Poster, Short Movie & Viral Advertisement Making and Delivering:** *Younger local people less know about the importance of sweetgum forests, thus they aren't motivated to protect the forests. That's why, we will collect data related with environmental history belong to sweetgum forest. Then we will prepare a poster, short film and viral advertisement which will include the material and moral worthies of sweetgum forests, especially for elementary & high schools, and university departments in Mugla.*

**Progress:** We didn't start to preparations for this activity yet. But we want to diversify the social products in cheapest ways. As an example one of our volunteer has developed a ceramic magnet with sweetgum leaf and fruit themed as a gift for the festival. 500 magnets gifted freely to the people who attended to our planting festivals.



**500 Ceramic magnets themed “I’m Saving My Sweetgum Tree” gifted to the students who attended to our festivals.**

**5. Lobbying & Communication:** *We will follow a lobbying & communication strategy, related with disseminate to applying of corridor methodology, Sweetgum Oil Action Plan and monitoring the key wildlife species. Also we will communicate with local ecotourism sectors and local youths during the second edition.*

**Progress:** After our first interim report, we sent our progressive information reports to General Directorate of Natural Heritage Conservation (GDNHC), General Directorate of Nature Conservation and National Parks, General Directorate of Forestry, Mugla Regional Directorate of Forestry and Rectorate of Mugla University. We've prepared a current road map as an annotation report for the new General Director of GDNHC. But the process is stable for now because of the General Director has recently changed. We have started to communication with Fethiye Forestry Department within the second sweetgum plantation festival. We have shared our documents related with Anatolian Sweetgum Forests with them.

We are following and orienting to Koycegiz Municipality about their recreational projects inside the sweetgum forests. They have 8km length walk way project inside the sweetgum forests. We encourage them to use ecological methods. Also we orient them about diversify the recreational events which are harmony with nature in the sweetgum forests. Nowadays

we are guiding them how they can build a nature park (inside the sweetgum forests) that is one of official conservation status in Turkey. On the other hand, the place where we thought it made as Nature Park, has some bureaucratic problems such as ownership, different conservation status etc. That's why nowadays we are meeting with some government personals, specialists from the universities etc. to overcome this problem.

While those processes continue, we also follow the property cases of Koycegiz Forestry Department (KFD) with private persons related with Anatolian Sweetgum Forests. The places where the cases continue, mostly line with citrus trees now. If KFD wins the cases then those places will be planted with Anatolian Sweetgum Trees. On the other hand, after our two visits, the prefect of Koycegiz declared that they choose one sweetgum forest patch as the corridor method will be applied where is next to the town of Toparlar that is one of the most important fragmented sweetgum forest parts in Koycegiz. We will give them scientific and public support during their afforestation efforts.

Except of above we gave a seminar about the *Environmental Ethics and Anatolian Sweetgum Forests* to the Managers and Directors of General Directorate of Combating Desertification and Erosion in February 9, 2015, in Ankara (Ministry of Forest and Water Affairs).



**6. Sweetgum Plantation Festivals:** *We will continue "The Festivals" which will be done in another pilot corridor area where we will decide together with Koycegiz and Fethiye Forestry Departments. We will plant nearly 4,000 sweetgum saplings in this event with elementary & high school, and university students.*

**Progress:** We did 2 sweetgum plantation festivals. One of them was done in Koycegiz within the World Forest Week in March 24, 2015. About 200 students (elementary, high school and university degree) had attended to the first festival. Nearly 2000 sweetgum saplings were planted during the festival. The festival took place in the press with 4 National and 20 Local news. Also during the festival we gave 1 regional interviews.





**200 Students planted nearly 2000 Sweetgum saplings during the first festival.**

The second festival had been done in Fethiye District in April 2, 2015. Before the festival we gave a seminar about the sweetgum forests to the students of Fethiye Vocational School (Mugla University). About 100 students from Fethiye Vocational School's Environmental Protection Department had attended to the second festival. Nearly 1000 sweetgum saplings were planted during the festival. The festival took place in the press with 1 national and 8 local news. Also during the festival we gave 2 regional and 1 national interviews. National interview was published on TRT Haber (Official State Channel in Turkey) that is the biggest news channel in Turkey and reached to the millions of Turkish people.



**100 Students planted nearly 1000 Sweetgum saplings during the second festival.**



Last winter Koycegiz Forestry Department had won some property cases related with Anatolian Sweetgum Forests. The places where the cases had won, lined with citrus trees now. And those places will be planted with Anatolian Sweetgum Trees in next autumn. So, we (the project team and Koycegiz Forestry Department) decided to convert this event to a festival. That's why we will continue to our plantation festivals in next autumn.

**7. Meeting, Reporting & Preparing of Scientific Papers:** *Except of interim and final reports, we will write technical reports to Departments of Forestry & Conservation. Suitable data will be integrated to articles for international journals. We will prepare publications for popular-science-magazines in Turkey. We will also attend to the scientifically organizations to raise the awareness.*

**Progress:** We (the project team) gave an advising about Anatolian Sweetgum Forests to the one of biodiversity projects of Mugla University's Environmental Sciences Department. The project name was "Nature Protection and Sustainable Ecotourism Project Around Latmos Region (Bafa Lake and Beşparmak Mountains)". We gave a seminar about the situation of the Anatolian Sweetgum Forests which live around Latmos Region within that project in April 7, 2015 in Milas District of Mugla.

We are preparing a special speech for "Koycegiz Workshop" which will be held in Koycegiz-Mugla, TURKEY, in between 24 and 25 April, 2015. The Workshop is been organized by Mugla University, Mugla Governorship, Koycegiz Municipality and District Governorate of Koycegiz. The Workshop will be focused to socio-economic, biodiversity, cultural and historical importance of Koycegiz Region. We will give a special speech about the importance of Anatolian Sweetgum Forests and what to do for the conservation of those forests in Koycegiz Region.

Next May, we will attend to the National Ecology Congress of Turkey which will be held in Sinop University (Sinop Province-Turkey) between 6 and 9 May, 2015. We are preparing to this event and we will present an oral presentation that titled "*The Importance of Social Environmental Sciences on Nature Conservation Via Case Study On Anatolian Sweetgum Forests*".