

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

**16444-2**

**Interim Report I**

**November 2014 - January 2015**

**Okan URKER**

- 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 started to collect data. We have listed and mapped the fields to be studied. 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. Firstly, we will try to get info from our contacts (university, NGO and government colleagues etc.) in those islands. Secondly, if we can't take necessary info and still have budget, we will try to field trips to those islands.

- 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 will put 8 camera-traps to catch the middle and big sized mammals inside the forests. Also we will work with 30 metal traps for small mammals. We will share primary results in next interim.



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

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. She will prepare 500 magnets for the festival freely.

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 the acceptance confirmation of the project application, project coordinator and project partners came together in Mugla Regional Directorate of Forestry. In this meeting, project partners did a good faith agreement and confirmed their responsibilities one last time. During the first interim, we have started to discussions with General Directorate of Natural Heritage Conservation (GDNHC), Mugla Regional Directorate of Forestry, Koycegiz Forestry Department and Koycegiz Municipality.

GDNHC was established 2 years ago instead of Environmental Protection Agency for Special Areas-Turkey (EPASA) which was main responsible for the sweetgum forests. EPASA had been a budget for the sweetgum forest conservation (wire fencing, expropriation, action plan, sustainable sweetgum oil production, ecotourism issues etc.). But all of those efforts and resources had been gone after EPASA was closed. Now we have started to lobby with GDNHC about perform those conservation efforts again. First of all we prepared a current road map as an annotation report for the new General Director of GDNHC.

We also have started to meet with Koycegiz Municipality about their recreational projects inside the sweetgum forests. They have a 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 built a nature park (inside the sweetgum forests) that is one of official conservation status in Turkey.



Project coordinator and other partners came together for the second project in Regional Directorate of Forestry, Mugla.

6. **Sweetgum Plantation Festival:** We will continue "The Festival" 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 didn't start to preparations for the festival yet. But we visited to old plantation site which planted during our first project. Our old plantation site partly was burned by someone who has a property problem with Koycegiz Forestry Department for a long while. We observed to burning area and reported to Koycegiz Forestry Department. But anyway very few seedlings were impacted negatively because of groundwater level is so high. We also visited to school gardens where we did tree planting festival in the first project. Sweetgum trees in the school gardens were very healthy due to the good management of school managers and their length was upper than 3 meters.



We visited to old plantation site which planted during our first project.



We also visited to school gardens where we did tree planting festival during first project.

7. **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.*

**Progress:** Our last scientific article belonged to first project was published in a national peer-reviewed journal in Turkey, in December, 2014. **Article Tag:** Ürker, O., Yılmaz, T., Öztürk, Ş., Çobanoğlu, N., 2014. Article; *Anatolian Sweetgum Forests In Terms Of Environmental Sociology*. Sociological Association, Turkey. Journal of Sociological Researches, 2014, Vol: 17, No:2, Pages: 152-187, Ankara-TURKEY.

For the second project, our last popular magazine article was published in an Turkish Popular Science Magazine in January, 2015. We specifically pointed out to supports of Rufford SGF and other partners such as Mugla University and Mugla Regional Directorate of Forestry. The article mainly focused to the activities which will be held during our new project in this year. **Article Tag:** Ürker, O., 2015. *Will Anatolia Conserve It's Sweetgum Tree?*. Technic Bulletin of Mediterranean Conservation Society, Turkey, No:7, Pages:5-10, January 2015, İzmir-TURKEY.

We also prepared a new article for #TARIH (#HISTORY) which is a very popular history magazine in Turkey. The article is focusing to importance of scientific nomenclature via case study of Anatolian Sweetgum Tree. We showed what happened to Anatolian Sweetgum Forests in case of wrong nomination. The article will be published next months. We will give a deeper information about article in next interim after the article is published. On the other hand, nowadays we are preparing the deeper and more scientific version of this article for an international peer-reviewed journal.