



PROJECT TEAM

Sena KURTULUŞ

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Final Project Report

1. Contestant profile

▪ Contestant name:	Sena KURTULUŞ
▪ Contestant occupation:	Student
▪ University / Organisation	Gazi Üiversity
▪ E-mail:	
▪ Phone (incl. country code):	
▪ Number of people in your team:	3

2. Project overview

Title:	From Quarry To Lap Of Nature
Contest:	Turkey
Quarry name:	Muratbey Limestone Quarry
Prize category: (select all appropriate)	<input type="checkbox"/> Education and Raising Awareness <input type="checkbox"/> Habitat and Species Research <input checked="" type="checkbox"/> Biodiversity Management <input checked="" type="checkbox"/> Student Project <input type="checkbox"/> Beyond Quarry Borders

Abstract

Biodiversity, constitutes the most necessary ring of the chain of sustainable development, making up the base of ecosystem and healthy existence of human-being. Sustainability of this ring is possible only through developing environmental conditions. Delivering all the unique habitats the nature offers us from damage and returning them to the nature is the best way to leave a permanent trace on the world. This project aims developing Muratbey Limestone Quarry located in Çatalca region in respect of various species, increasing the biodiversity of ecosystem and number of living species in that habitat, rendering it a place in which life is possible, providing the sustainability of the diversity and not to break the chain, but to become a ring of that chain.

Background information

Description

Muratbey limestone quarry is located in Catalca, Istanbul and 2 Mtons/year of limestone have been extracted from the quarry. The mining licensed area around 195.15 Ha. and the extraction permit area is 120.32 Ha. Mining land is belongs to our company. There are 8 benches on the quarry. There is a one big water pond which is used for de-dusting purposes such as; water spraying of mining roads. There is a river next to the quarry which is connected to the Büyükçekmece lake.

Habitat, flora & fauna description

There is a transition climate between Mediterranean and Blacksea conditions around the Marmara region. Therefore; there is a warm climate and the main flora is maquis around the region. Weeds & shrubs are existing in the run out mine parts of the quarry benches. Moreover; in the water pond, some fishes and frogs are living. Invertebrates, reptiles, mammals and birds are the other main types of animal species around the region. Partridges are the most precious birds in this area.

The Methods

There are step by step studies in this project aiming to make the stricken regions suitable for the purpose of using and living on without any consumption via the methods of “restoration ecology” by creating areas to support each other in order to enrich Muratbey limestone quarry in terms of biodiversity. These studies could be listed as spreading the red forest soil which is the symbol of liveliness in the environment, surrounding the environment with “*Cupressocypariseylandi*” by applying “windbreaks”, creating a small puddle with drilling method,

using the flumes out of the puddle and the water in order to water the kinds such as *Fragaria vesca*, *Lavandula officinalis* and *Casteanea sativa* in certain time and amount, setting stops to rest in the region, establishing freedom stops with *Alectorischukar* kind, creating an aquatic ecosystem by setting a puddle area and establishing a solar system in the region. Each stop has been named being equal to its activity.,

JUST A STEP TO NATURE: This is a place which is just 150-200 meters far away from the embrace of nature, where you can safely park your cars and proceed, by discovering the ecosystem. The activity will give a pleasure both you and nature.

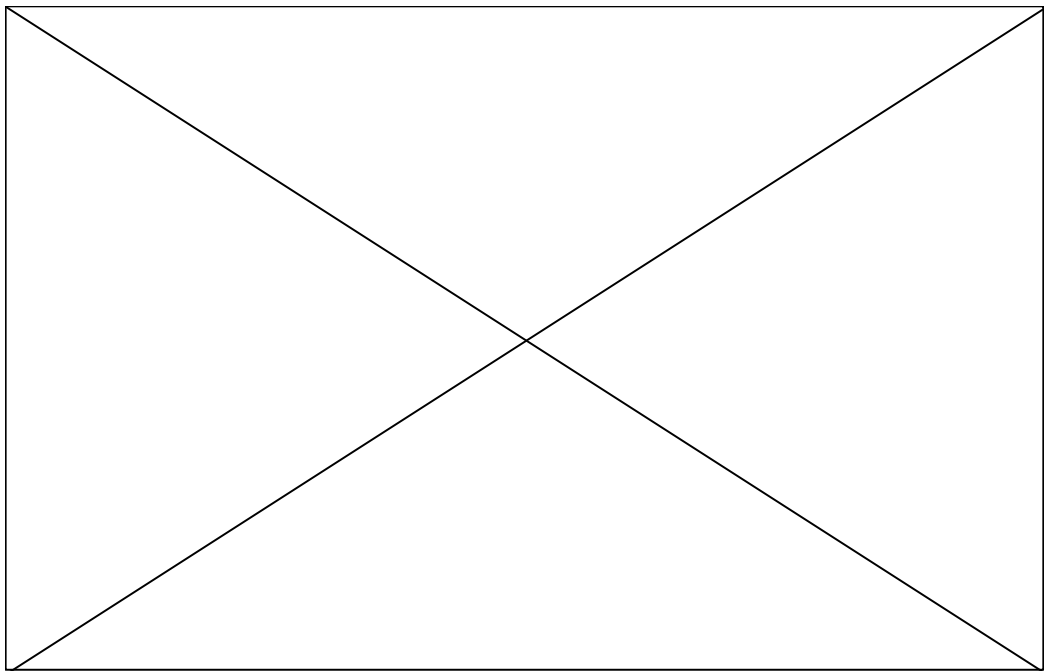
AQUATIC ECOSYSTEM: The enrichment of flora and fauna of the region requires the existence of aquatic ecosystem. For this, a puddle has been tried to be created. Thus, flumes to be taken out of the puddle and the surrounding of the puddle will be able to have water in the next stages.

BREATH STOPS: Stops have been established in certain intervals to share the beauty of the region enlivened again with people. There have been benches created by recycling from the waste barrels in the quarry in these stops. The closest people to this region are the workers in the quarry. Therefore, maybe the workers deserve the right to breathe first in the nature.

POPULATION HEAVEN: The weakened flora of the quarry has gained strength again as parallel to coagulation of the region. Plantation of different kinds of plants has been done with this purpose. *Lavandula officinalis* kind and the smell of sedative you will feel every time the wind blows are ready to be an invitation to your new dreams. *Fragaria vesca* kind that will add colorfulness to the quarry is a candidate to become a variety that can address to not only your eyes but also your health as a whole with its flower, leaves and fruit. Besides, contribution has been made to the forestation of the region by preferring *Casteanea sativa* among stable tree kinds.

TAX STOP: Humankind being accustomed to take from nature will find the opportunity to pay the taxes of what they take. The people who are motivated in this stop will find the opportunity to buy seedlings and plant out and also they can bring the seedlings themselves and plant them in their living spaces.

ANIMATED VIDEO OF “FROM QUARRY TO LAP OF NATURE”



Click to watch animated video of “From Quarry To Lap Of Nature” :

<https://www.youtube.com/watch?v=aDQKcxvknOs>

THE PROCESS OF PROJECT PLANNING

The most important aim of us is to qualify the generosity that the nature gives us whole time as individuals loving the nature. Therefore, we have started with a good planning.



Photo 1: Sena Kurtuluş, Ezgi Okumuş, Dr. Nurcan Uzel (from left to right)



Photo 2: Sena Kurtuluş, Ezgi Okumuş, Dr. Nurcan Uzel (from left to right)

FACTORY VISIT AND INTERNATIONAL JURY BÜYÜKÇEKMECE AKÇANSA THE PROJECT PRESENTATION



Photo 3: AKÇANSA factory front Dr.Nurcan Uzel,
Sena Kurtuluş



Photo 4: International jury members Boris Barov , after
the presentation, a photo with the national coordinators
and other project owners

SELECTION OF PROJECT APPLICATIONS



Photo 5 : Proje uygulama alanı
belirlenmesi Sena Kurtuluş



Photo 6 : Determination of the project
application Dr.Nurcan Uzel ve Sena
Kurtuluş



Photo 7: Boris Barov international juror in the practice area, the national coordinator Çağlar Geven, Dr. Nurcan Uzel, Sena Kurtuluş



Photo 8: Dr. Nurcan Uzel, Boris Barov, Sena Kurtuluş



Photo 9: Project practice

MATERIAL PREPARATION



Photo 10 :Painted with oil paint
box of tomato paste



Photo 11 : “*Lavandula
officinalis* “



Photo 12 : “*Cupressocyparis
leylandi*”



Photo 13: Dried tomato paste cans



Photo 14: Wooden pot



Photo15: Pepper seedlings



Photo 16: Tomato seedlings



Photo17: Pots made of tomato paste as recycling box



Photo 18: Seat and Pots



Photo 19 : "*Fragira vesca*"



Photo 20 : "*Casteanea sativa*"



Photo 21: Cucumber seedlings



Photo 22: Sheep manure



Photo 23: Rocket Seed



Photo24: Parsley Seed



Photo 25: Material cabinet

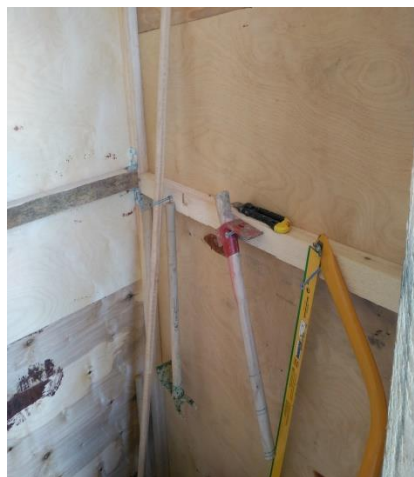


Photo 26: Material inside the
cabin



Photo 27: Wooden seats and
tables



Photo 28 : Rolls of turf will be ready to land

PROJECT PRACTICE



Photo 29: The first version of the land



Photo 30: Laying turf field ready to roll



Photo31: Wooden pots of lavender is planted at the entrance in the lap of nature



Photo 32: Placing the area of material shed



Photo 33 ve 34 : Ezgi Okumuş recycling plant pots sewing



Photo 35 : Sena Kurtuluş Seedlings were planted around the nature of the arms while securing C.leylandi



Photo 36: Just A Step To Nature



Photo 37: The Liberty Station



Photo 38: Aquatic ecosystems



Photo 39 ve 40 : Aquatic ecosystems environment



Photo 41 : Breath stops



Photo 42: Breath stops



Fotoğraf 43: Sena Kurtuluş ve Ezgi Okumuş When setting up the tax



Photo 44: Tax stop



Photo 45: The seedlings are planted to
tax stop. pepper seedlings

LAND IMAGE AFTER APPLICATION OF VARIOUS ANGLES FROM

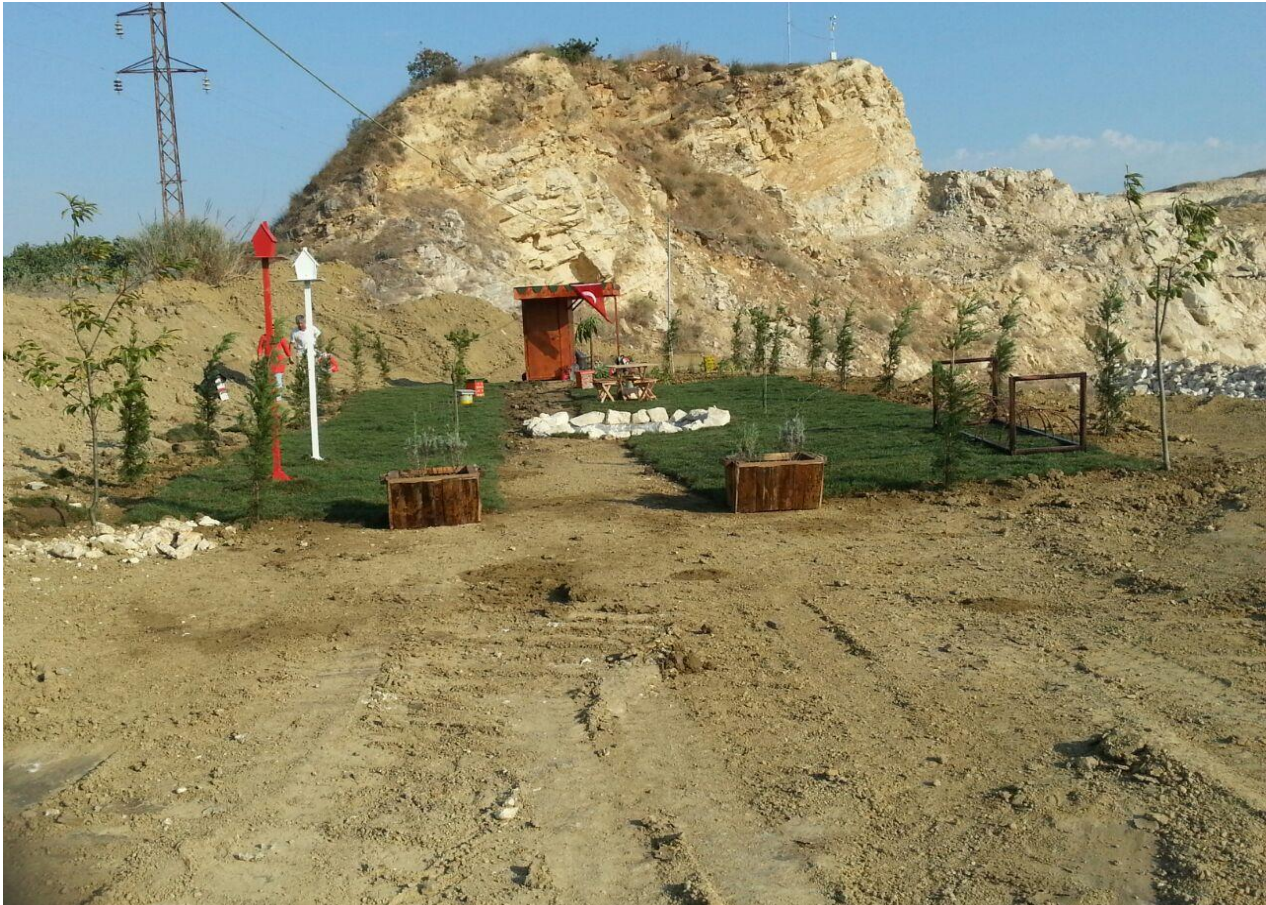


Photo 46



Photo 47



Photo 48



Photo 49



Photo 50



Photo 51



Photo 52

RESULTS AND EVALUATION

Important changes on natural factors as a result of the interventions and pressures on the nature have become a threat for human life. These negative effects and results on the nature cannot be prevented by modern technology and cannot be transformed into its old state by regeneration of the nature in short time. Thus, “natural balance” formed by all natural factors is damaged due to wrong and excessive use and therefore it affects habitats- that is ecosystems- of all living creatures notably human beings.

The target of this project is to gather the natural factors and enliven the field by renewing the ecosystem.



Photo 53 : Visit the nature lap of the quarry workers



Photo 54 : Quarry workers of breath at
rest stop in my selfie 😊



Photo 55: Quarry visitors when taking pictures of nature

The project of “From the Quarry to the Nature” has reached its aim partially after the application. The project aims to develop and enlarge the aquatic ecosystem and make the solar system dominant over the region. The most important issue for these aims to be realized is the budget. It is certain that the winner has become the nature in this process. Also, the project group has enjoyed the process. The workers have been the first ones to breath in the quarry and it shows that the project has reached its aim.

The project of “From the Quarry to the Nature” has not only added visual beauty to the field but also it has been seen that flora and fauna in the region have enlivened. In the visit in 16.08.2016, observing bees, ants, butterflies and snails in the quarry shows the fauna liveliness and the seeds maintaining their liveliness, grass increasing in length, pepper seedlings and the plant of lavender increasing in length show the liveliness of flora.



Photo 56: Quarry workers



Photo 57 : A week after the project implementation (16.08.2016). vitality in the lap of nature



Photo 58: The growth of pepper seedlings



Photo59: Picture of the wealth of fauna
in Quarry.Bee on grass.

(16.08.2016)



Photo 60: Collage of project
practice

APPENDICES

ATTENTION !

An Internet connection is required to watch the video project

APPENDIX 1: Nature lap Project Implementation Phase of the Quarry

Click to watch video : <https://www.youtube.com/watch?v=3DQyhl-VxY4>

APPENDIX 2: Nature lap Project Implementation Phase of the Quarry

Click to watch video : : <https://www.youtube.com/watch?v=7GQHBFYZ3jE>

APPENDIX 3: Revival of the land after the project implementation from the Quarry

Nature lap. 08/16/2016 butterflies flying in the field

Click to watch video : <https://www.youtube.com/watch?v=GxKTNGKDhxx>

Project tags (select all appropriate):

This will be use to classify your project in the project archive (that is also available online)

Project focus:

- ☐ Biodiversity management
- ☐ Cooperation programmes
- ☐ Education and Raising awareness
- ☐ Endangered and protected species
- ☐ Invasive species
- ☐ Landscape management - rehabilitation
- ☐ Rehabilitation
- ☐ Scientific research
- ☐ Soil management
- ☐ Urban ecology
- ☐ Water management

Flora:

- ☒ Conifers and cycads
- ☒ Ferns
- ☒ Flowering plants
- ☐ Fungi
- ☒ Mosses and liverworts

Fauna:

- ☒ Amphibians
- ☒ Birds
- ☐ Dragonflies & Butterflies
- ☒ Fish
- ☐ Mammals
- ☐ Reptiles
- ☒ Spiders
- ☒ Other insects
- ☐ Other species

Habitat:

- ☐ Cave
- ☐ Cliffs
- ☐ Fields - crops/culture
- ☒ Forest
- ☐ Grassland
- ☐ Human settlement
- ☐ Open areas of rocky grounds
- ☐ Recreational areas
- ☐ Screes
- ☐ Shrubs & groves
- ☒ Soil
- ☐ Wander biotopes
- ☐ Water bodies (flowing, standing)
- ☒ Wetland

Stakeholders:

- ☒ Authorities
- ☐ Local community
- ☐ NGOs
- ☐ Schools
- ☐ Universities