

## **1. CLP project ID & Project title**

Improving the Community-Based Conservation of Lake Kuyucuk Ramsar Site, Kars, Turkey

## **2. Host country, site location and the dates in the field**

Turkey, Kuyucuk Lake, Kars

## **3. Names of any institutions involved in organising the project or participating**

Kars Directorate of Nature Conservation and National Parks, Sub-Governorship of Arpaçay District, Sub-Governorship of Akyaka District, Governorship of Kars Province

## **4. The overall aim summarised in 10–15 words**

Creating a conservation and sustainable development model to unify biodiversity monitoring and conservation of Lake Kuyucuk

## **5. Full names of author(s)**

Emrah Çoban, Ayşegül Çoban

## **6. Permanent contact address, email and website**

[emrahcoban1@gmail.com](mailto:emrahcoban1@gmail.com), [aysegulvet@gmail.com](mailto:aysegulvet@gmail.com)

[www.kuzeydogu.org](http://www.kuzeydogu.org)

KuzeyDoğa Derneği, Ortakapı Mah. Şehit Yusuf Bey Cad. No:93 Kars Türkiye 36000

## **7. Date which the report was completed**

06.03.2017

## **Project Partners & Collaborators**

### **General Directorate of Nature Conservation and National Parks:**

Responsible for the conservation and management of Lake Kuyucuk. Studies of the lake can only be done with its official permission. The management plan of Lake Kuyucuk is conducted, monitored, and evaluated by the Directorate.

### **Local People of Kuyucuk Village:**

Use and protect Lake Kuyucuk.

### **Local Wetland Commission (LWC):**

Responsible for the application of the management plan which also works to resolve any new problems pertaining to the lake.

**Sub-Governorship of Arpaçay District:**

Monitors the activities of the villages around Lake Kuyucuk in the service area of Arpaçay district.

**Sub-Governorship of Akyaka District:**

Monitors the activities of the villages around Lake Kuyucuk in the service area of Akyaka district.

**Section 1:****Summary (max 200 words)**

Since 2007, supported by three CLP grants, KuzeYDoga Society ([www.kuzeydoga.org](http://www.kuzeydoga.org)) has documented 233 bird species at Lake Kuyucuk, greatly expanding the initial bird list of 44 species when our team started counting birds there in 2004. We predict the total to be over 250 species. 32 of the bird species documented at Lake Kuyucuk are considered threatened in Turkey and 21 species are global Red List species that are threatened or near threatened globally. We have been working with the local communities to reduce the threats to the lake, especially cattle grazing reedbeds and the withdrawal of groundwater for agriculture and livestock. We have undertaken intensive environmental education and village-based biocultural tourism training, which led to increased ownership, pride in and conservation of the lake and its birds by local villagers. Now, villagers themselves tell visitors that the lake hosts 233 bird species, is the first Ramsar wetland in eastern Turkey, and is globally important. Villagers founded an environmental NGO and started to organize the yearly Lake Kuyucuk Bird Festival on their own. We helped prepared the preliminary Lake Kuyucuk management plan that was in effect through the end of 2015. From 2017-2022 we will help revise the management plan. We counted 200,300 individual birds (total of counts at different times) from 147 species. We also banded 1,469 birds from 57 species during the course of this CLP award. In addition to biodiversity monitoring, we implemented a number of education and outreach projects. Over 110 people have received training in multiple aspects of eco-tourism, including providing education, local accommodations, traditional meals and hospitality. We identified the diminishing water level of Lake Kuyucuk as the main threat to biodiversity and ecotourism in the region. This reduction in water resources is not the result of one large factor, but is rather the amalgamation of various influences, both natural and anthropogenic. Nevertheless, use of ground and surface water for agriculture and livestock is the main culprit, and is exacerbated

by hotter-than-average summers. We successfully lobbied to prevent decision makers from acting hastily or undertaking radical initiatives that may have had unintended negative consequences in the years to come, such as replenishing the lake's water with the very polluted water from Kars River. The research and education projects conducted by KuzeyDoga have laid an important foundation for the conservation of Lake Kuyucuk and have helped ensure that any protective actions are rigorous and effective, involving both locals and regional decisionmakers.

### **Introduction (max 500 words)**

This project ensured the long-term conservation of Lake Kuyucuk by working with all stakeholders. Mid-way through the project, Lake Kuyucuk experienced its biggest crisis of the past decade and dried out after a very hot summer. Project partners were immediately informed of the situation of the lake and national news stories drew attention to the lake's plight, triggering rapid government action. Soon after, the local wetland commission gathered and we shared our experiences collected during the project and in the past decade. The commission, led by the governor of Kars, concluded that the villages surrounding Lake Kuyucuk need alternative water sources and a plan was prepared for bringing water to these villages from mountains 42 km to the north. The villages applied to the Ministry of Agriculture for a water pipeline project with a 4.6 million USD budget. We requested from the local wetland commission to conduct a revision of the original management plan, which ended in 2015.

#### **•• The conservation value of the project work**

The biggest challenge we faced was the decrease in the water level of Lake Kuyucuk, culminating in its temporary drying in 2014. The drying of the lake occurred from a number of factors, including the drawing of water from the lake for agriculture and livestock and the active use of water wells in villages, depleting groundwater. However, in the report prepared by the Directorate of State Hydraulic Works (DSI), the main reason cited for the drying of the lake was declared as an increase in air temperature which led to evaporation, and a lower than average rainfall. DSI is the body responsible for building dams, irrigation schemes, and, in the past, draining wetlands. Consequently, they blame climate change and other non-human factors for any loss of wetlands, even when there are clear human influences at play, such as the withdrawal of groundwater in the case of Lake Kuyucuk. In fact, the very name Kuyucuk means "little well". Since 1997, Lake Kuyucuk depth went down from 13 m to 5 m in 2004 and to 0 m in 2014. Although the dry summer in 2014 was a factor, the continuous use of surface and groundwater by surrounding villages is the ultimate cause, but is downplayed by the government bodies. It is convenient to blame it all on climate change instead.

#### **•• Background to the project site and its conservation significance**

Lake Kuyucuk (Turkish: Kuyucuk Gölü) is a small shallow lake located in Arpaçay district of Kars Province in the Eastern Anatolia Region of Turkey. It has a maximum area of 245 ha (2.45

km<sup>2</sup>) and a former (1997) maximum depth at 13 m (43 ft). The lake is an internationally recognized Ramsar site (2009), important for its bird life, and is an ecotourism destination honored in 2009 as a European Destination of Excellence (EDEN) site for sustainable tourism.

The studies conducted by KuzeyDoga Society ([www.kuzeydoga.org](http://www.kuzeydoga.org)) recorded 233 bird species using the area. With continuing monitoring, we predict that the total number of bird species will exceed 250. At the lake, **we documented 32 birds species threatened with extinction in Turkey and 21 species are global Red List species that are threatened or near threatened globally.** The lake is also an Important Bird Area (TR089) and Important Nature Area (DOG025). Lake Kuyucuk **was declared a Wildlife Development Area by the Ministry of Environment and Forestry in 2005.** With CLP support since 2008, Lake Kuyucuk was selected as the first RAMSAR area of Eastern Anatolia and also the 13th RAMSAR area of Turkey, led by KuzeyDoğa Society's efforts and with support of Turkey's General Directorate of Nature Conservation and National Parks, the Governorship of Kars Province, Kafkas University, and the Directorate of Environment and Forestry of Kars Province. Lake Kuyucuk is one of only two Ramsar wetlands in an area of 350,000 km<sup>2</sup>; in other words in an area roughly as big as Germany.

Lake Kuyucuk harbors threatened bird species and globally important bird populations, including over 20,000 ruddy shelduck (*Tadorna ferruginea*) during fall migration, a breeding population of globally endangered white-headed duck (*Oxyura leucocephala*), red-breasted goose (*Branta ruficollis*), velvet scoter (*Melanitta fusca*), western marsh harrier (*Circus aeruginosus*), common crane (*Grus grus*), black-winged stilt (*Himantopus himantopus*), Eurasian coot (*Fulica atra*), black-necked grebe (*Podiceps nigricollis*), and greylag goose (*Anser anser*).

Other notable fauna found around the lake include red fox (*Vulpes vulpes*), Nehring's blind mole rat (*Spalax nehringi*), southern vole (*Microtus levis*), marbled polecat (*Vormela peregusna*), and the European green toad (*Bufo viridis*), marsh frog (*Pelophylax ridibundus*), and sand lizard (*Lacerta agilis*). The highly acidic water of the lake does not support fish.

The European Destinations of Excellence (EDEN) of the European Commission has listed Lake Kuyucuk as a notable tourist wildlife reserve since 2009. Since 2011, an annual two-day birdwatching festival has been held in mid-June. With KuzeyDoga's leadership, a tourism center and guesthouse at the lake was proposed in 2012 and was finished in 2014 to serve ecotourism.

- **Identify the key partners and their role**

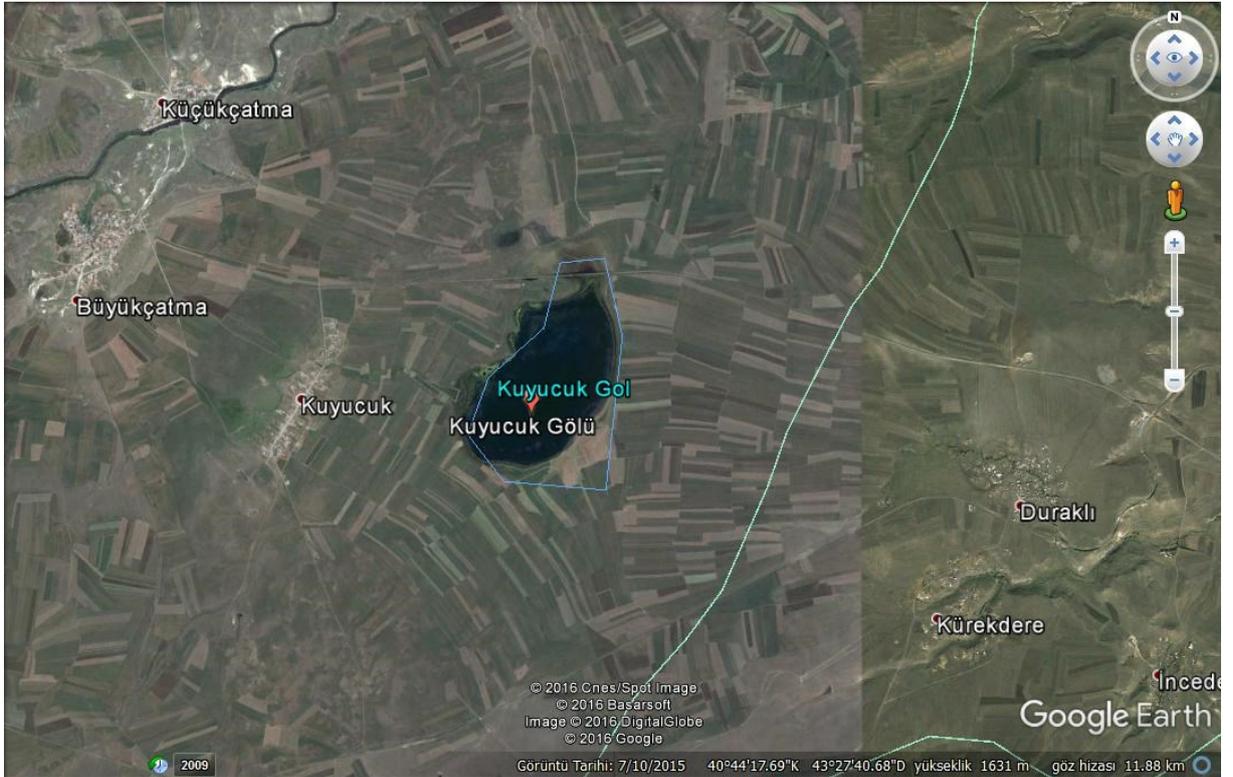
**Directorate of Nature Conservation and National Parks:** The Directorate is responsible for the management of Lake Kuyucuk and the enforcement of conservation measures. Research at the lake can only be done with the official permission of the Directorate of Nature Conservation and National Parks. Preparation of the management plan of Lake Kuyucuk is funded and monitored/evaluated by Directorate of Nature Conservation and National Parks

**Local People of Kuyucuk Village:** The local people are the project partners who utilise and protect Lake Kuyucuk.

**Sub-Governorship of Arpaçay District:** Monitors the activities of the villages around Lake Kuyucuk in the service area of Sub-Governorship.

**Sub-Governorship of Akyaka District:** Monitors the activities of the villages around Lake Kuyucuk in the service area of Sub-Governorship.

- **Include a map of the area**



## **Project Members**

### **Project Leader**

**Name:** Emrah Coban **Nationality:** Turkish

**Education with highest level completed:** Master

Emrah Coban earned his master degree in biology. Starting as a freshman bird banding volunteer with KuzeyDoga's projects in 2006, he has 11 years of fieldwork experience in bird research, satellite tracking of large carnivores and vultures, and ethnobotany, and a decade of professional experience in nature conservation projects.

### **Project Assistant**

**Name:** Sedat Inak

**Nationality:** Turkish

**Education with highest level completed:** Master

Sedat is a professional bird bander and ornithologist. He is doing his PhD at Kafkas University and has worked for KuzeyDoga Society between 2009 and 2014. He has banded birds at both Lake Kuyucuk and Aras River bird banding stations ran by KuzeyDoga.

### **Public Relations Officer**

**Name:** Aysegul Karaahmetoglu(Çoban)

**Nationality:** Turkish

**Education with highest level completed:** B.Sc. Currently doing a Ph.D at Kafkas University.

Aysegul studied veterinary medicine at Istanbul University, Turkey. She started to do wildlife rescue and rehabilitation when she was a student at the university. After graduation she started to do wildlife rehabilitation as her profession. She also serves as the wildlife veterinarian in KuzeyDoga's carnivore conservation ecology projects in Kars.

## **Section 2:**

### **Aim and objectives (max 200 words)**

#### **1-Implement the management plan of Lake Kuyucuk Ramsar Site.**

Monitoring the implementation of the management plan and studying the efficacy of sustainable management practices. We are helping revise the second management plan that will cover the 2016 to 2020.

**2-Maintain traditional arid farming practices around Lake Kuyucuk to avoid chemical pollution and sedimentation due to irrigated farming:** Help educated villagers to prevent sediment and chemical materials from reaching the lake. Work with the local people develop agricultural solutions to save the lake. Encourage a different plowing style to reduce erosion and reduce the amount of agricultural chemicals used.

**3-Restore reedbed areas at Lake Kuyucuk for breeding birds and natural filtering of the lake**

Collaborate with partners to monitor and maintain the breeding island that was constructed. Because of cattle overgrazing on the lake shore, most of the reeds grow around the island.

**4-Encourage ecological and cultural tourism around the lake**

Work collaboratively with the local people and local tourism agencies to create alternative (ecological) sources of income.

**Changes to original project plan (max 200 words)**

The most important change was triggered by the drying out of Lake Kuyucuk in September 2014. First of all, the institutional players were informed of potential solutions for the problem. Later, there was a call to gather the local wetland commission. The first step was to prepare reports about potential solutions to this problem and to develop and enact a short-term action plan. It was decided that the villages around Lake Kuyucuk needed an alternative source of water for agriculture and livestock, to prevent villagers from using surface and ground water feeding Lake Kuyucuk. Villagers have applied to the government for a pipeline to bring water from the mountains about 40 km away. If this water is delivered, some of it will be given to Lake Kuyucuk to prevent it from drying again.

## **Methodology**

### **1. Bird Banding Studies**

A bird banding study was carried out in 2013 in Lake Kuyucuk for 45 days by using mist nets, between the hours 16:00-09:00.

### **Bird Watching and Counting**

There had been two different methods used as transect and fixed point counting. Any birds heard and seen were recorded. The birds that were breeding were also reported.

The transect method was performed around the lake and covered a distance of 9.2 kilometers. Fixed point counts were performed at 18 different fixed points.

## 2. Monitoring the Management Plan

The Local Wetland Commission gathered every six months. In these meetings, we overviewed the activities that were not implemented or interrupted.

## 3. Culture and Tourism Implementations

It was performed by expert personnel with applied presentations within the scope of the project.

### Outputs and Results (max 500 words)

#### 1.1. Continue monthly bird surveys at the lake

The bird counting has been conducted regularly at Lake Kuyucuk. In addition, there have been other bird counts performed on World Birdwatching Day, World Biodiversity Day, Migratory Bird Day and World Environment Day. The results of the counts have been shared with General Directorate of Nature Conservation and National Parks. Moreover, the mid-winter waterfall count activities have been conducted every year, under the leadership of the Directorate of Nature Conservation and National Parks.

Year	Total Species of Birds Counted (totals of all counts at different times)	Number of Individuals
2013	187	77,543
2014	165	92,122
2015	112	30,655

#### 1.2. Continue breeding bird surveys every spring

The breeding birds have been recorded in the spring season. Particularly, it has been determined that the number of the breeding birds were lower when the lake dried out in 2014.

Year	Total Number of Nests
2013	101
2014	65
2015	12

#### 1.3. Continue mid-winter waterfowl surveys every winter

Mid-winter waterfall survey activities were carried out every year in mid-February, with the vehicle and staff support of the Directorate of Nature Conservation and National Parks. The results were shared with Directorate of Nature Conservation and National Parks. Because Lake Kuyucuk is usually completely frozen in mid-winter, these results are not very meaningful.

Year	Mid-Winter Waterfall Count Total Bird Species	Number
2013	0	0
2014	3	35
2015	0	0

#### **1.4.Continue bird banding studies every spring and autumn**

Lake Kuyucuk Bird Banding and Education Center continued bird banding. The bird banding activity was only carried out in 2013 because of a combination of unsuitable weather conditions, the change in the wetland vegetation, the lack of expert personnel, the lack of volunteers (due to harsh working conditions) and the drying of the lake in 2014.

Year	Total Number of the Birds Ringed	Number of Individuals
2013	57	1469
2014	Not performed	Not performed
2015	Not performed	Not performed

#### **1.5.Lobby central government to raise money for fencing**

In the result of the reseach carried out by the General Directorate of Nature Conservation and National Park, it was determined that there is no need to enclose Lake Kuyucuk with fences. The experts of Directorate of Nature Conservation and National Parks employed a warden for long term conservation of the lake instead.

#### **1.6.Prepare a fencing plan considering the results of ecologic restoration studies**

The ecological restoration study was done by Sean Anderson from CSUCI in 2013.

## **Objective 2: Maintain traditional arid farming practices around Lake Kuyucuk**

### **Activities:**

#### **2.1. Identify a participative plan with locals & local institutions to start organic farming**

As a result of the studies done about the use of artificial fertilizer by Büyük and Küçük Çatma, Çarcıoğlu, Duraklı and Kuyucuk villages around Lake Kuyucuk, the ratio of the artificial fertilizer being used by these villages has decreased. Besides, as a result of the organic agriculture research done in the area by Directorate of Food, Agriculture and Livestock, the emmer wheat being grown in Büyük Çatma Village has been licensed as an organic agricultural product. Growing of a suitable plant for silage making was initiated in Büyük Çatma and Küçük Çatma Villages. Hence, the grazing pressure on the lake by Büyük Çatma cattle has dropped.

#### **2.2. Organize meetings, events and awareness raising programs for locals**

##### **Tourism Trainings**

The tourism training at Lake Kuyucuk was carried out by ecotourism consultant, Ferit Karakaya. There were 3 trainers and 102 people that joined the training at Lake Kuyucuk.

##### **Sub-governorship of Arpaçay District Chief Meetings**

There have been meetings in Lake Kuyucuk Visitor Center every 6 months, carried out by the district governorship of Arpaçay District. In these meetings, Lake Kuyucuk has been presented to the other villages as an example of conservation and ecotourism

##### **Discover Serhat Travel Tour**

In the “Discover Serhat Travel Tour”, operated in the leadership of Serhat Development Agency and Eksi 36 Sport Club Society, 46 people stayed at Lake Kuyucuk Visitor Center for one night. The team, who did bird counts and nature walks in the morning greatly enjoyed Lake Kuyucuk.

##### **Lake Kuyucuk Festival**

The Lake Kuyucuk Festival that was operated for the first time by KuzeyDoğa Society in 2008 and 2009 is now being celebrated every year with the leadership of Kuyucuk Village.

#### **2.3. Organize a site visit with locals where organic farming is successfully carried out**

A field trip was done to Boğatepe Village, a village half an hour away where organic farming is being done successfully. Kuyucuk villagers were informed about the successful traditional village tourism activities at the mountain village of Boğatepe that succeeds in drawing tourists despite having no wetlands or associated bird diversity. It was inspiring for Kuyucuk villagers

to see that their village culture and cuisine is itself a major attraction and complements the bird diversity of Lake Kuyucuk.

#### **2.4. Network with other farmers to identify opportunities to market local organic products**

Büyük Çatma Village made progress on growing and marketing wheat that has a low amount of gluten. As a result of the collaborative work done with Boğatepe Village, the producers who had been operating the production and the packaging in their village eliminated the middle men and started making more income. Moreover, Büyük Çatma Village where the local people attach importance to silage making, started to packed silage for sale.

#### **2.5. Organize sedimentation surveys at the lake**

In the meetings done with the Directorate of Food, Agriculture and Livestock and the local people who have arable/cultivated lands, it was shown that the local people had been plowing the lake side since this way was more efficient according to the villagers. Also in the research done by State Hydraulic Works, it was determined that the sediment quantity coming out from the existing lands in the area was not enough to fill the lake.

#### **2.6 Prepare a report on sedimentation and share it with local farmers & local directors**

The Provincial Directorate of Food, Agriculture and Livestock, made a verbal warning to the the citizens who who have arable/cultivated lands. In the verbal warning made to 43 people, it was explained that the plowing technique they had been applying was causing soil loss and that they should plow parallel to the lake shoreline

#### **2..7. Organize meetings, site visits and awareness raising programs for local farmers about sedimentation**

There have been regular, face-to-face annual meetings with the local people and the Provincial Directorate of Food, Agriculture and Livestock. Every year, approximately 25 people have been informed about sedimentation and natural agricultural activites.

#### **2.8. Prepare a manual for local farmers showing them how to farm their lands efficiently**

A collaborative work has been done with Serhat Development Agency that is active in the area. SERKA, based on the analyses it carried out, has released a booklet that has information on which kind of plants to grow in which area and the things to pay attention to while doing agriculture.

### **Objective 3-Restore reedbed areas at Lake Kuyucuk for breeding birds and natural filtering of the lake**

#### **Activities:**

#### **3.1. Gully Drain System of Kuyucuk Büyükçatma and Duraklı Villages**

The areas that the local villagers make their livestock drink water have been determined a warden has been employed by Directorate of Conservation of Nature and National Parks who guards around the lake in order not to have the animals to get out of these areas. The gully drain systems of Kuyucuk Büyükçatma and Duraklı villages have been set up by Kars special provincial administration. As a result of that, the dirty water mess up to the lake has been prevented.

#### **3.2. Working on Employment of a warden for Lake Kuyucuk to decrease the overgrazing in the area**

The local people used to make their livestock graze on the lakeshore, particularly at the beginning of april. After the meeting with Directorate of Conservation of Nature and National Parks, the start of warden's job was made earlier. As a result of that, the protection of the plants grow on the lakeshore was provided. The level of the ownage of the local people of the lake increased in the last two years with the result of the lake dried out. The local people have made the activity of their livestock grazing around the lake minimum. Therefore, it was observed that the area of the birds to breed became larger while the size and the quality of the reeds were increasing around the lake.

### **Objective 4-Encourage ecological and cultural tourism around the lake**

#### **Activities:**

#### **4.1. Creating Lake Kuyucuk Nature Festival**

The Kuyucuk Nature Festival we carried out for the first time in 2008 with the support we got from CLP continued for 3 years and now this festival is being organized by the society founded by the local people of Lake Kuyucuk for the aim of protection of Lake Kuyucuk. This festival has a status as being very important in the ecological and cultural promotion of the region.

#### **4.2. Organising educations for food presentation, honouring, food service and presentation**

After the meetings we did with the local people we have learned that the most important lack of the local people was honouring of the tourists, food service and presentation and the souvenirs that were demanded by the tourists.

With the support of our partners within the Project, the education in the leadership of Ferit Karakaya, for honour, food presentation was given to the local people by participating of the adjacent villagers, in the Kuyuk Village Visitor Center. Besides, an education for production of the souvenirs was given in the leadership of Symbiosis Society. Pillows inside padded with geese feather and outside embroidered and illustrated with bird figures, ragbags and patchwork materials with bird figures were produced.

#### **4.3. Building Lake Kuyucuk Visitor Center in Kuyuk Village**

By building the visitor center in the village, the number of the visitors in the village increased. Kuyucuk became the most visited place after Ani Ruins and Lake ıldır.

The result came out after the reseach and the promotion activities that, Lake Kuyucuk was a place as been known by Kars City Center and the districts but not visited.

We will continue to work on this subject as society and local management bodies.

#### **Communication & Application of results (max 200 words)**

Working with the Kars Wetland Commission improved the communication between stakeholders and improved the speed and efficiency of the conservation actions taken. Our excellent relationship with local and national press enabled us to communicate widely our conservation message and activities, and to promote Lake Kuyucuk as an ecotourism destination.

#### **Monitoring and Evaluation (max 200 words)**

Monthly meetings were organized by the project team to monitor activities. Any new activity were implemented. The management plan was used as a main activity book, since the main activity point was the implementation of Lake Kuyucuk management plan.

#### **Achievements and Impacts (Max 500 words)**

The most important success we made within the scope of the project for the conservation of the biological diversity of Lake Kuyucuk was the effective implementation of the management plan of the lake and making the revision of the plan once again for the next 5 years, in 2016. In addition, KuzeyDoęa worked to determine the causes and solutions after the lake dried out, helped lead the meeting of the stakeholders and worked with the villagers to come up with an effective solution that also ensured the long-term survival of the lake.

#### **Capacity Development and Leadership capabilities (Max 250 words)**

KuzeyDoęa's team has monitored the management activities during the project. By this means, the team improved its skills and strengthened its bond with the local community. KuzeyDoęa's team incorporated more than 100 volunteers into the project activites during the project and

many of these volunteers have gone on to volunteer or paid careers in biodiversity monitoring and conservation.

### **Section 3:**

#### **Conclusion (max 250 words)**

At the conclusion of our CLP project, we are happy to conclude that the Lake Kuyucuk project has been a success story and has become a national example for how a formerly unknown site became a famous Ramsar wetland and ecotourism destination. Our long-term commitment since 2004, much of it supported by three CLP grants, has slowly changed the initial scepticism of the local people and turned them into the most important advocates for the conservation and promotion of Lake Kuyucuk. At first, they did not understand why these outsiders were wading in the reeds and mud at night, sometimes in freezing temperatures, to mist net and band birds. They were suspicious and even hostile, some of them blaming us for being spies. However, we persisted and worked hard to communicate with the villagers, students, decisionmakers and the media regularly. We showed them the birds we banded, let villagers release them and worked constantly with the local and national media to publicize and promote Lake Kuyucuk. The villagers started to realize the global importance of their lake and took great pride in seeing their lake and village in hundreds of news stories. In fact, this pride ended up being more important than the financial benefits the villagers obtained from ecotourism. In retrospect, we had underestimated the importance of local pride. Increasing fame of Lake Kuyucuk also helped increase government support for Ramsar designation, for agreeing to our proposal to build Turkey's first bird nesting island and for choosing Lake Kuyucuk as Turkey's 2009 European Destination of Excellence (EDEN) for Sustainable Tourism out of 55 applicants across Turkey. These designations led to the creation of Lake Kuyucuk Management Plan, renovation of the guard hut at the lake, appointment of a guard from the local village, construction of a birdwatching tower, and the construction of the \$240,000 Visitor's Center and Guesthouse with 10 rooms. At all stages, KuzeyDoga provided help and leadership, mostly pro-bono. With increasing national fame and government investment, the villagers became very proud of Lake Kuyucuk and also started benefiting from tourism. They passed a threshold of ownership and took the initiative of promoting Lake Kuyucuk themselves. They established their own NGO to protect Lake Kuyucuk and promote ecotourism and started organizing Lake Kuyucuk Nature Festival on their own every June. Now, the villagers feel great ownership of the lake and alert us if they see any threats to the lake. We continue to monitor the lake's birds, water levels and ecological status, to provide guidance to the villagers and help promote the lake in the media. However, we feel confident that we have reached a stage where the villagers are able to care for their lake without our direct, daily involvement and we believe that they will ensure the survival of Lake Kuyucuk even if we stopped working there.

#### **Problems encountered and lessons learned (max 500 words)**

The most serious problem that KuzeyDoğa Society faced was the drying out of Lake Kuyucuk. This problem is a situation that was originated from multiple little reasons, which are a

combination of natural and unnatural. We succeeded to prevent the decision makers from making wrong decisions by approaching the situation calmly. We stopped the managers from bringing dirty water to the lake from the Kars stream, which could have altered the chemistry of the lake and the entire ecosystem and explained that the lake would refill with patience and a reduction of use of the natural sources of water for the lake. One year later, the lake had rebounded and refilled as a result, with minimal ecological damage to the area.

### In the Future (maximum 200 words)

KuzeyDoğa Society will continue to conduct scientific research around the lake, especially long-term monitoring of bird populations and water levels. We will also be helping in the drafting and development of the 2017-2022 Lake Kuyucuk management plan, which is being initiated soon.

### Financial Report

Itemized expenses	Total CLP Requested (USD) *	Total CLP Spent (USD)	% Difference	Details & Justification (Justification must be provided if figure in column D is +/- 25%)	Proposed Spending (Preliminary Report Only)
<b>PHASE I - PROJECT PREPARATION</b>					
Communications (telephone/internet/postage)	1.800,00	1885,30	5%		
Field guide books, maps, journal articles and other printed materials	900,00	841,53	-6%		
Insurance	1.500,00	1615,58	8%		
Visas and permits					
Team training					
Reconnaissance					
Other (Phase 1)					
<b>EQUIPMENT</b>					
Scientific/field equipment and supplies	3.200,00	3217,20	1%		
Photographic equipment	1.000,00	974,55	-3%		
Camping equipment	1.000,00	947,16	-5%		

Boat/engine/truck (including car hire)	9.000,0 0	8940, 15	-1%		
Other (Equipment)	3.000,0 0	3040, 37	1%		
<b>PHASE II - IMPLEMENTATION</b>					
Accommodation for team members and local guides	3.600,0 0	3683, 17	2%		
Food for team members and local guides	3.680,0 0	3925, 71	7%		
Travel and local transportation (including fuel)	6.700,0 0	7143, 66	7%		
Customs and/or port duties	2700	2636, 32	-2%		
Workshops	6.000,0 0	5215, 18	-13%		
Outreach/Education activities and materials (brochures, posters, video, t-shirts, etc.)					
Other (Phase 2)					
<b>PHASE III - POST-PROJECT EXPENSES</b>					
Administration	2.500,0 0	2793, 36	12%		
Report production and results dissemination	2.500,0 0	2292, 72	-8%		
Other (Phase 3)					
<b>Total</b>	<b>49.080, 00</b>	<b>49.15 1,96</b>			

#### **Section 4:**

#### **Appendices**

Output	Number	Additional Information
Number of CLP Partner Staff involved in mentoring the Project	5	Birdwatchers
Number of species assessments contributed to (E.g. IUCN assessments)		
Number of site assessments contributed to (E.g. IBA assessments)	1	Kuyucuk Lake IBA
Number of NGOs established	1	Local village NGO: Kuyucuk Gölünü Yaşatma ve Koruma Derneği
<b>Amount of extra funding leveraged (\$)</b>	\$25,000	
The Christensen Fund conservation grant	£4200	
The Whitley Fund conservation grant	\$35,000	
Management Plan Expenditures paid by the		

Directorate of Nature Conservation and National Parks		
Number of species discovered/rediscovered	0	-
Number of sites designated as important for biodiversity (e.g. IBA/Ramsar designation)	0	-
Number of species/sites legally protected for biodiversity		-
Number of stakeholders actively engaged in species/site conservation management	1	Warden hired to protect Lake Kuyucuk. Salary is provided by the Directorate of Nature Conservation and National Parks
Number of species/site management plans/strategies developed	1	Revision of the Management Plan of Lake Kuyucuk 2017-2022
Number of stakeholders reached	~870	Through workshops, educational activities, talks, presentations, Kuyucuk village festivals, and celebrations of environmental days (Wetlands, Biodiversity, Migratory Birds, Environment, Birdwatching, and related days)
Examples of stakeholder behaviour change brought about by the project.		Kuyucuk villagers were outraged by the drying of the lake in 2014. In fact, a villager notified us immediately via Facebook and asked us to bring the national media to report on

		it. We did and the media coverage led to immediate government action and the convening of the Kars wetland commission.
Examples of policy change brought about by the project	-	-
Number of jobs created	3	1. Warden of Lake Kuyucuk 2. Staff of Kuyucuk Visitor Center and Guesthouse
Number of academic papers published	-	Two are in progress.
Number of conferences where project results have been presented	16	Including International Society for Conservation Biology, Turkey Biology Congress and various talks at universities

## Bibliography

- KuzeyDoğa Society Annual Activity Reports

## Address list and web links

Emrah Çoban / Ayşegül Çoban

KuzeyDoğa Derneği Orta Kapı Mah. Şehit Yusuf Bey Cad. No:93 Kat:1 Kars / Turkey

[www.kuzeydoga.org](http://www.kuzeydoga.org)

## Distribution list

Due to sensitive local relationships, we will appreciate if you do not put the whole report online, but you can put the Summary and Conclusion. Thank you.