

Final Evaluation Report

Your Details	
Full Name	Fatih Polat
Project Title	Nest, Population and Conservation Parameters for the African Softshell Turtle (<i>Trionyx triunguis</i>) in Antalya, Turkey
Application ID	40029-1
Date of this Report	December 2023

1. Indicate the level of achievement of the project's original objectives and include any relevant comments on factors affecting this.

Objective	Not achieved	Partially achieved	Fully achieved	Comments
Population and distribution assessment				<p>We conducted a survey on <i>Trionyx triunguis</i>, a member of the Trionychidae family. The survey was carried out at Ilica and Kömürcüler streams in a total area of 5 km. A total of 40-45 individuals were detected in the two streams during the season. The detected individuals were seen intensively especially during May-July, which is the nesting period. While few individuals were seen in August, the number of individuals increased again in September and October.</p>
Nesting and habitat assessment				<p>During the survey, nesting areas for <i>Trionyx triunguis</i> were identified. One nesting area was identified at Ilica stream and two at Kömürcüler stream. These areas were surveyed daily, and nests were identified. During the season, 104 nests were found at Ilica stream and 27 nests at Kömürcüler stream. Signboards were hung at the nesting areas along both streams and the areas were surrounded with tapes to provide protection. The bases of the nesting areas were filled with rubble and the surrounding area was covered with dense reeds. Angling was intense in both nesting areas.</p>
Awareness raising				<p>Information and conservation training was provided to business operators, anglers, hotel staff, young people and students in the vicinity of Ilica and Kömürcüler streams. Along with the training activities, activities such as distributing brochures and posters, hanging information signs and distributing t-shirts to some people were carried out. In addition to these, the presence</p>

				of the species in the area was made known through a communication network we established with the fishermen and businesses that have an important place in the area.
Stakeholder briefing				Stakeholders were contacted one-on-one and informed about the worsened situation of the species and its habitat, conservation urgency and conservation strategies. The final report of the project was communicated to the stakeholders, and they were informed about the priorities for the conservation of the species. We received a promise for an increased protection of the area for the coming seasons.

2. Describe the three most important outcomes of your project.

a). Through consistent surveys conducted over 6 months, the project determined the nest and population sizes of *Trionyx triunguis* (African softshell turtle) at Ilica and Kömürcüler streams and identified areas that should be prioritised for protection. According to the IUCN Red List, the Mediterranean subpopulation of the species is categorised as critically endangered due to the continuous decline of its population worldwide.

The discovery of this species is very important for science and conservation because the presence and population density of this species, which is known to be less than 1000 individuals in the Mediterranean, in these streams is important for determining the conservation areas of the species.

In addition, the species' presence has gained local support for future conservation efforts through good communication of its conservation status and ecological importance in educational efforts and by raising awareness.

During the surveys, a total of 131 nests were recorded along two streams in the 2023 season. This is more nests than in 2020 (33 nests), 2021 (58 nests) and 2022 (75 nests).

b). Both rod and boat fishing activities are quite high in the area. As a result of the training activities, we conducted for fishermen in the study areas, we established a good connection with the fishermen. With these connections we established, we created a communication network and were informed about all kinds of situations and activities taking place in the field. They provided great support by informing other fishermen and tourists visiting the area to increase awareness and conservation of the species. When we were not in the area, they provided great support to the conservation situation by informing law enforcement and us in case of any problems.

c). The project highlights the problematic status of *Trionyx triunguis* living in Ilica and Kömürcüler streams, and the urgent need for the conservation of its habitat. Through awareness raising activities such as stakeholder interviews, communication and training with fishermen, briefings for local and foreign tourists, information signs posted in the study areas, brochures and posters distributed, and school visits, the project has informed more than 3,000 people in the region about the ecological importance and conservation of the species. Awareness raising has also generated interest and sympathy for the species. This, in turn, has helped a general support to form and remain for the species' conservation. Institutions, young people and students, and the fishermen pledged to participate in efforts to protect the species and its habitat.

The support from the community indicates a positive change in attitude that will significantly advance the conservation of *Trionyx triunguis* in the Ilica and Kömürcüler streams. This, if mainstreamed, will help achieve IUCN's goal of species and habitat conservation.

3. Explain any unforeseen difficulties that arose during the project and how these were tackled.

We encountered three unexpected problems in the working areas:

a. Feeding of the species: Tourists staying in hotels near the streams were feeding the species in order to see them. Although we tried to reduce this situation by informing, distributing brochures and posters, we could not completely prevent it. As a result of our interviews with stakeholders, conservation institutions and law enforcement agencies, it was suggested that warnings and training should be increased in these areas in the coming years, especially with hotel operators, and different solutions should be found.

b. Habitat destruction: The reeds around the streams produce mosquitoes intensively. With intense complaints from the public, it was planned that the institution responsible for these areas would destroy the reeds with bulldozers. However, proving that this was wrong, and that the area was a nesting area, mosquito spraying was carried out only on certain days of the week with the support of the municipality. In this way, the problem was completely solved.

c. Inadequate nesting space: One of the biggest problems in the area is that there is no suitable nesting space for the species, or it is too narrow. The narrow nesting space was revealed when the species was observed to damage each other's nests during nesting. For example, 104 nests detected along Ilica stream were subjected to intense predation due to the narrow nesting space. Although we tried to make an artificial nesting space to prevent this, we were not completely successful because the soil structure in the region had to be changed for creating this artificial nesting space. The fact that the lower part of the area was previously filled with rocks prevented us from reaching a complete result for this process. However, it helped us to reveal the reasons why a serious artificial nesting space should be built for these areas in the coming years.

No matter how negative the problems may seem, it is an important situation for future planning and conservation as our efforts offered new ideas and suggestions for conservation measures for the future.

4. Describe the involvement of local communities and how they have benefitted from the project.

The participation of institutions and organisations provided great support and success to the project, especially in terms of the sustainability of the project by granting permits for research and through their involvement in emergencies or problems during the project. Within the scope of the project, these institutions and organisations have gained knowledge about the ecological importance and conservation of the species. Their active involvement in the protection of these two streams in the coming years is important both for them and for the species.

Fishermen who depend on the stream or the sea to earn their living were also informed about the ecological role of the species in the stream. They were asked to avoid the use of harmful substances in fishing as it destroys the water body and leads to the death of all life forms in streams, including turtles. Information and networking on these issues was very important, as knowledge about the eco-benefits of the species helped fishermen to support conservation. Besides the ecological contribution of the species, tourists staying in nearby hotels visit the area to see the species. This allows the facilities in the vicinity to be preferred, giving them economic benefits. For this reason, the surrounding facilities show great care and support.

5. Are there any plans to continue this work?

Applications for new funding will be made for the continuation of this work. In addition, the communication network established in the area will ensure the continuation of the protection. We will try to ensure that measures are taken by revealing what needs to be done in the coming years with some institutions and organisations. In case there is a new funding support, we will contact the institutions and ensure the creation of artificial nesting spaces. With the support of EKAD, I will keep on contributing to the conservation of and awareness about the species by continuing my personal education and work in the field.

6. How do you plan to share the results of your work with others?

The final reports will be shared with The Rufford Foundation, the institutions and organisations responsible for the streams, the people in the communication network established during the study, and the hotels and business facilities located near the streams. A research paper will also be published to add to the scarce literature on *Trionyx triunguis* (African softshell turtle) to inform the literature about new nesting sites and population status of the species.

7. Looking ahead, what do you feel are the important next steps?

- The most important step is to urgently establish artificial nesting areas along Ilica and Kömürcüler streams, and to enclose and protect these areas.

- Conducting long-term monitoring research to determine the population status and distribution rate.
- Reducing the anthropogenic pressure on the species to some extent, especially by creating new areas for anglers and allowing them to hunt in those areas.
- Ensuring the continuity of information and education activities about the species by setting up info-stands in areas where there is intense human activity along Ilica and K m rc ler streams.

8. Did you use The Rufford Foundation logo in any materials produced in relation to this project? Did the Foundation receive any publicity during the course of your work?

Yes, we provided t-shirts with the Rufford Foundation logo to many fishermen we cooperated with, institutions and organisations responsible for the areas, and volunteers conducting the field work. The Rufford Foundation logo was added to the presentation slides, brochures and posters, and signs erected in the area. During this study, an interview about the species and the area was broadcasted on national channels and on our web page, where the support of The Rufford Foundation was also mentioned. Rufford Foundation's support will also be referred to in future articles based on the findings.

9. Provide a full list of all the members of your team and their role in the project.

Fatih Polat (Team Leader) - Project leader and field researcher. He ensured a smooth progress of the project with his experience in field studies and trainings.

Mehmet Caner Akbay – He coordinated the volunteers in the field studies, carried out trainings in the project area, and created a serious awareness among the businesses and hotels through trainings. He helped with the fieldwork and training activities.

Aslihan G ng rmez (Communication Specialist) – She led the organization of training activities including stakeholder meeting, conservation education in communities and outreach in schools. She also assisted with field research.

Volunteers - Together with student volunteers who participated in the Sea Turtle Research, Monitoring and Conservation Project for EKAD, they provided support to the team leader in fieldwork, earned how to work in the field, distributed brochures and posters to local and foreign tourists, and provided them information about the species.

10. Any other comments?

Since there are relatively few studies on the species, the findings obtained from this project and the studies carried out in previous years will pioneer both the literature and new conservation studies to be carried out in the coming years. According to the results of this project, the lack of habitat and nesting space for the species is a serious

problem. This paints a worrying picture for the status of *Trionyx triunguis* in the country. *Trionyx triunguis* receives little attention in terms of conservation studies. Therefore, there is an urgent need to implement interventions for data collection (for research purposes) and awareness raising, as well as guidance for policy development.







AA
YASAM

Antalya'da nesli tehlike altındaki Nil kaplumbağaları korunuyor

Antalya'da biyolog Fatih Polat, nesli tükenme tehlikesi altındaki Nil kaplumbağalarının Manavgat ilçesindeki yuvalama alanlarını 3 yıldır koruyor.

Süleyman Elçin |
28.06.2023 - Güncelleme : 28.06.2023



Antalya

Türkiye'de Ege ve Akdeniz kıyılarındaki denizle buluşan nehir ve derelerde rastlanan Yumuşak Kabuklu Nil Kaplumbağası (Trionyx triunguis) dünyada nesli tehlike altındaki türler arasında yer alıyor.

Ekolojik Araştırmalar Derneğince (EKAD) yürütülen "Deniz Kaplumbağalarını İzleme ve Koruma" projesi kapsamında Antalya'nın Manavgat ilçesi Kızılot sahilinde görev yapan biyolog Fatih Polat, ilçedeki bazı derelerde Nil kaplumbağası popülasyonunun olduğunu belirledi.

Hayvanın popülasyonunun araştırılması ve korunmasına yönelik EKAD'ın yanı sıra doğa koruma projelerine fon sağlayan Rufford Foundation desteğiyle proje başlatan Fatih Polat, önemli turist hareketliliğinin bulunduğu Ilica ve Kömürcüler Deresi kenarındaki kumsal alanlarda bulunan Nil kaplumbağalarının yuvalama alanlarını tespit etti.

Bölgeye, kaplumbağaların korunmasına yönelik bilgilendirici tabelalar asan, uyarıcı şeritler çeken, yuva çevrelerine işaret çubukları diken Polat'ın 3 yıldır sürdürdüğü bu çalışmalar sayesinde 2021 yılında tespit edilen 8 yuva sayısı geçen yıl 50'ye yükseldi.

<https://www.aa.com.tr/tr/yasam/antalyada-nesli-tehlike-altindaki-nil-kaplumbagalari-korunuyor/2932716#>

Click on the link for the full article.



"Nil Nehri'nden Akdeniz'e yayılan bir tür"

EKAD Kızılot Bölgesi Proje Sorumlusu biyolog Fatih Polat'ın, dere kenarlarındaki bir günlük "iyilik mesaisi"ne AA ekibi de eşlik etti.

Polat, AA muhabirine, Nil kaplumbağalarının yuvalarını nehir, göl ve denize yakın sahillerdeki kumullara yaptığını söyledi.

Türkiye'de Hatay'dan Dalyan'a kadar denize dökülen nehir ağızlarında Nil kaplumbağalarının görülebileceğini ifade eden Polat, "Nil Nehri'nden Akdeniz'e yayılan bir tür. Kaplumbağanın kabuğunun üzeri yumuşak deriyle kaplıdır. Göze çarpan sivri bir buruna sahiptir. Boyları 1 metreyi geçebilir. Balık, sucul böcekler, yengeç, solucan ve kurbağa gibi canlılarla beslenir. Burada türü takip edip elde ettiğimiz bulguları da bilimsel çalışma olarak sunacağız." dedi.

Polat, Nil kaplumbağalarının mayıs ve temmuz ayları arasında yumurtalarını kumul alanlara bıraktığına dikkati çekerek, "Bu yuvalardan 10-11 haftada çıkan yavrular sularla buluşur. Ancak son yıllarda özellikle turizm hareketliliğinin olduğu yerlerde nehir ve dere kenarlarındaki yapılaşmalar sonucu yuvalama alanları yok oluyor. Özellikle turistler tarafından elle beslenmesi hem canlıların davranışlarına hem de yaşam alanlarına zarar veriyor. Nehirlere giren sürat tekneleri de yaralanıp ölmelerine neden oluyor." diye konuştu.

Deniz kaplumbağalarının yanı sıra Nil Kaplumbağaları için de bölgede "yaşam nöbeti" tuttuklarını dile getiren Polat, şunları kaydetti:

"3 yıldır yuvaları tespit edip koruma altına alıyorum. Her yıl yuva sayısı artıyor. Buradaki koruma ve bilgilendirme çalışmalarımız etkili oldu. 2021 yılında bu alanda ilk yaptığımız çalışmada 8 yuva tespit ettik. 2022'de 50'ye yakın yuva tespit ettik. Bu yıl 28 yuvamız var ancak yuvalama sezonu sonunda 50'nin üzerine çıkacaktır. Bu kaplumbağa bölgenin biyolojik çeşitliliği açısından çok önemli. Umarım gelecek nesiller de bu kaplumbağaları burada görmeye devam edecek."



