

DIVE IN BLUE GROWTH

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Different approaches for the protection and promotion of ancient and WWII, Accessible Underwater Cultural Heritage Sites (AUCHS). The cases of Fournoi and Leros wreck sites under the ongoing INTERREG V-A Greece- Cyprus2014-2020 project “An.Di.Ka.T.”

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Abstract

In the context of the promotion and utilization of the rich Underwater Cultural Heritage of our country, the Ephorate of Underwater Antiquities (EUA) participates as a partner in “An.Di.Kat”, an INTERREG V-A, Greece-Cyprus 2014-2020 programme, titled “**Diving Routes in Marine Protected Areas of the Eastern Mediterranean - Development of Diving Tourism Network**”. Among the main goals for EUA are the “field study - identification, delimitation and mapping of diving routes of environmental and archaeological / historical interest in the areas of Fourni and Leros islands” (D: 4.3.1), a “protocol and instructions for development and operation of a diving network” (D: 6.3.1) and the participation in drawing up an action and business plan (D: 6.3.2) from the results of the field study. The archipelago of Fourni, after the systematic research of the Fournoi Underwater Archaeological Project, during the years 2015 - 2020, emerged as one of the richest archaeological sites in the Mediterranean with an extremely large concentration of ancient, medieval and modern shipwrecks while in the sea area of Leros, a large number of modern shipwrecks related to the famous “Battle of Leros” that took place between the Allies and the Axis powers during World War II are protected monuments. Both cases have been selected due to their large concentration of UCH monuments of indisputable historical/archaeological value for each respective period. Both islands have the capacity to become attractive diving destinations with an abandonment of AUCHS, even though they are not among the famous tourist destinations. In both cases significant historical and archaeological research needs to be carried out prior to protection and promotion proposals. Despite their similarities, the two cases exhibit specific features and significant differences in relation to the approach of their field study as well as the methodology applied for protection and promotion of the sites. With the most important one being the chronological difference of the majority of wrecks found in the respective areas, there are also differences in the scale of the sites, the mass of the materials found, as well as different approaches regarding some ethical issues that arise in the case of Leros, for example in relation to the survivors of these wrecks. This paper aims to focus on these differences.

1. Introduction

In the context of the promotion and utilization of the rich Underwater Cultural Heritage of Greece, the Ephorate of Underwater Antiquities (EUA) participates as partner in “ANDIKAT” project, an INTERREG V-A, Greece-Cyprus 2014-2020 programme, titled "Diving Routes in Marine Protected Areas of the Eastern Mediterranean - Development of Diving Tourism Network". The programme is co-financed by the Greek state and the European Community. Lead beneficiary of the operation is the Region of South Aegean and other partners include Samos Municipality, Energeiaki AE, Ministry of Agriculture of Cyprus, Cyprus University and Limassol Tourism board.

Main goals of the project is the development of a network of diving routes in eight marine areas in Greece and Cyprus, as a tool for the protection and preservation of the marine natural environment, through a sustainable know-how transmission in terms of management and protection of marine areas, the conservation of the natural heritage, the promotion of the cultural heritage, the awareness of the people for the above, as well as a sustainable development and enrichment of the already existing touristic facilities and the reinforcement of the economy of the regions included in the programme through the promotion and establishment of a new touristic product - the low-impact diving kind of tourism.

The role of the Ephorate of Underwater Antiquities consists in considering the possibility to make the many Underwater Cultural Heritage sites of two relatively remote areas of Greece, accessible to the public: the islands of Fournoi and Leros (Figure 1).



Figure 1. The island of Fournoi and Leros in the Southeast Aegean.

The Ministry of Culture through the Ephorate has three basic targets according to the deliverables of the programme. Chronologically first, field research has to be done, in order for a selection of the appropriate underwater cultural heritage sites to be made, as for both the areas there exists a big concentration of candidate sites. Once selected, the areas or sites proposed as accessible to the public have of course to be protected through the legal processes that Greek and international law imply. Last but not least, a protocol for good practices, based on current legislation and the experience gained from the pilot operation of the site

of Peristera in Alonissos, in combination with the geographical, archaeological and historical characteristics of each area has to be proposed.

Both in Fournoi and Leros, as previously mentioned, numerous Underwater Cultural Heritage sites of either archaeological or historical interest have been identified, but giving access to all of them wouldn't be manageable for the time being. For this reason, the final selection of some of them has been based on some criteria established. The archeological or historical value of each site has been taken into serious consideration, as opening of the UCH to the public has been one of the primary aims of the Ministry. In addition, the state of preservation of both the sites and the artifacts included, as well as the adequacy and the coherence of each site were quite a significant aspect that was examined before a site was proposed. The assurance that several safety requirements, such as medical centers, decompression chambers or heliports can be easily accessed, has been also an important concern, as both regions are quite remote and far from major urban areas. Accessibility to every departure position either by nearby marinas, good roads or other visitor facilities (accommodation, restaurants etc) along with the climatic conditions (mainly of the various winds blowing in the Aegean Sea) present in each area have also been examined. Last but of prime significance, allowances for the fulfillment of the divers of all levels have been made. The recommended trails are separated into three basic diving levels; beginners, experienced and technical divers. Therefore, three depth zones are proposed, one shallow up to 20m for beginners, a second up to 40-45m for experienced divers and a deeper one up to 60m for well trained and technical divers, the number of which has been steadily increasing in recent years.

2. Fournoi Island

The Fournoi archipelago lies several miles to the south of the large eastern Aegean islands of Samos and Ikaria. Composed of 20 islands and islets, the complex is a significant part of the Aegean's navigational landscape. Its position across the passage formed by the island of Samos and Ikaria, on the north-south sailing route in the eastern Aegean, as well as on the west-east axis from mainland Greece to the east Asian coast, result that these islands received during the past a very large load of navigation traffic.

A collaborative survey by the Greek Ephorate of Underwater Antiquities and RPM Nautical Foundation from 2015 to 2018 located 58 shipwrecks, although a considerable area remains to be surveyed. For the complex of Fournoi, four groups of wrecks have been selected in order to be visited: three groups at the east of the island of Fournoi and one group of wrecks at the northwest part of the island of Thymena. As a departure point for the east part group of wrecks the small port of Kamari is proposed, while for the wrecks of Thymena, the divers are proposed to be departing from the main port of Fournoi (Figure 2).



Figure 2. The location of the 58 wrecks around Fournoi and the AREAS A-B-C-D of proposed routes.

Focusing at the east of the island of Fournoi, the area around Kamari cove, three distinguished areas of interest are recommended:

1. AREA A - Aspros Kavos, meaning “White Cape”, because of the white foam that sea droplets form due to strong winds blowing often at this area, justifies the concentration of 6 wrecks discovered.
2. AREA B - Right in front of Kamari cove, there is a small islet called Agios Minas, where three wrecks have been identified. This is the Area B of the routes of Fournoi, at depths of 25 m up to 65 m, suggested for very experienced divers.
3. AREA C - In between the two islands, very close to the shore, right 200m from Kamari, one can dive at an anchorage where 22 anchors of several periods have been located. Access is also possible by swimming directly from the shore. This trail is suggested for experienced divers, as the average depth is about 35 to 60 m.

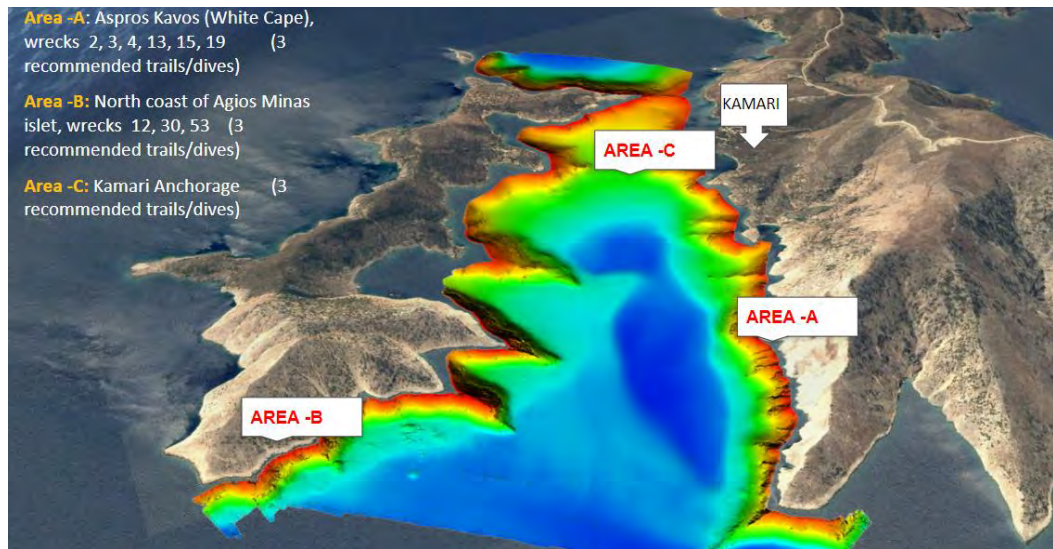


Figure 3. The AREAS A, B, C of Fournoi around Kamari cove.

Presenting in detail all the trails' proposals goes beyond the purpose of this paper; therefore focus will be set on just one of the areas above, AREA A. In this area, two different trails are proposed (Figure 4):



Figure 4. The AREA A with the Trails A.1 & A.2

1. Trail A.1 – At the northernmost point of Aspros Kavos is recommended for experienced divers. The visitor starts the diving trail from south at Shipwreck 15, which is deeper (at 45-50 m) and continues northwards, to Shipwreck 13, which is at a shallower depth (15 m.), saving decompression time. Figure 5 shows a suggested path over the shipwrecks. Depending on the divers' preferences though, the shipwrecks can be visited separately, increasing the number of persons that can dive into the shallower wrecks.

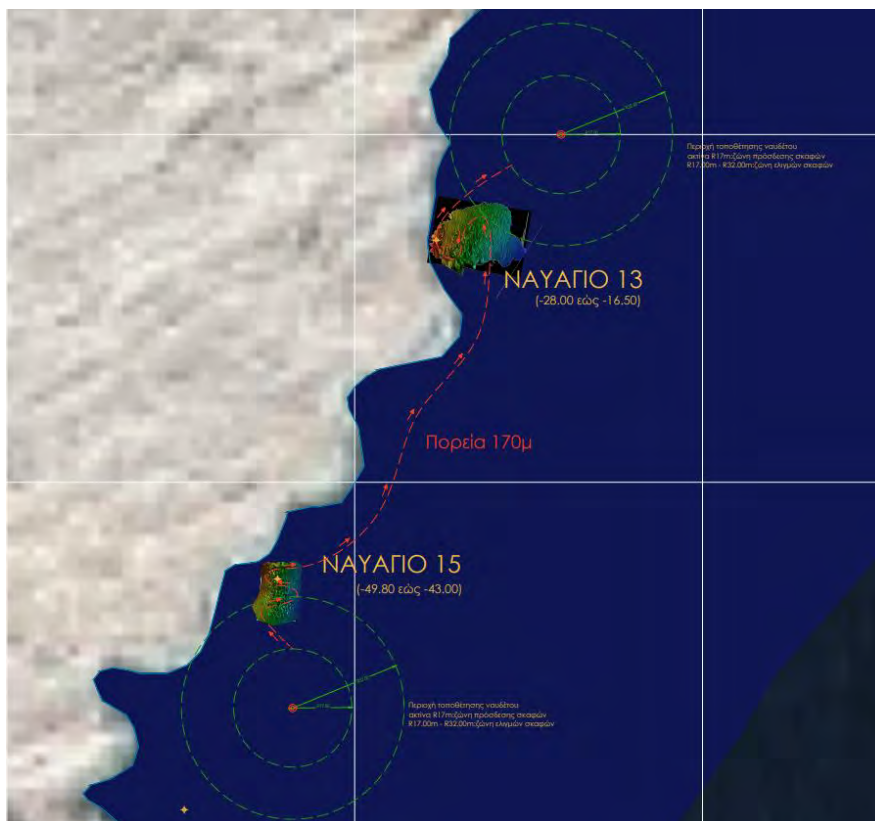


Figure 5. Suggested path of the Trail A.1

2. The Trail A.2, always at the AREA A of Aspros Kavos is also a trail addressed to experienced divers. Divers start from north going south, at an average depth of 45m at Shipwreck 15 -same as before- and move south to Shipwreck 2 at 20-25 m, continuing to Shipwreck 3, the main concentration of which is at relatively the same depth. The course continues further south and upwards, with Shipwreck 19 (at 18 m) and then at Shipwreck 4 (18-10 m). The duration of the dive is estimated at about 40 minutes, while the decompression times are limited due to the continuous ascent till the end of the course. Again here, the several shipwrecks can be separately visited or less experienced divers can skip the deep wreck of 45m and follow a shorter trail with a group of four wrecks.

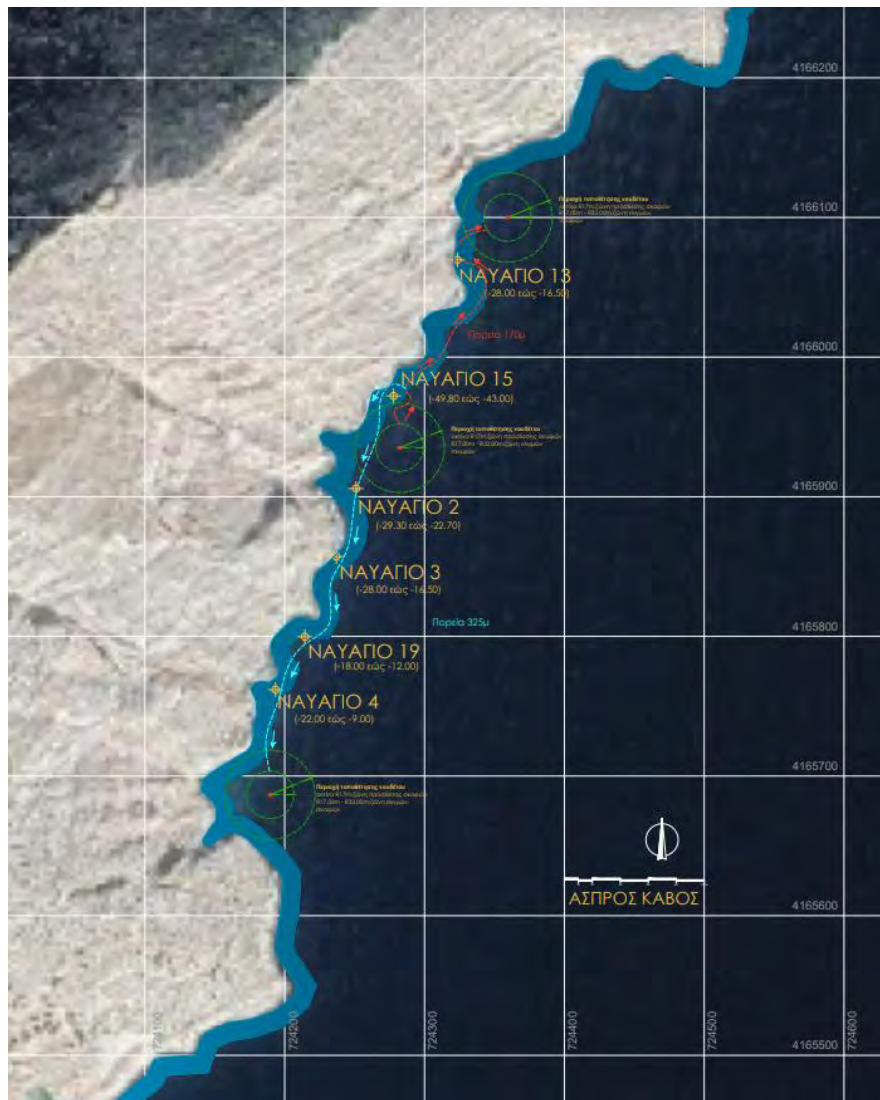


Figure 6. Suggested path of the Trail A.2

With the identification of 58 shipwrecks and much more coastline to search, Fourni may have one of the largest concentrations of ancient shipwrecks in the world. Choosing among them which can be accessible by the general public is a rather difficult task that demands rumination, attention and pondering on many factors simultaneously.

3. Leros Island

The second region of interest of the project is the island of Leros. The island has a unique modern history, as from 1912 to 1943 was an important Italian naval and aeronautical base, with military installations, artillery, ammunition depots, barracks, command posts, radio center, big fuel warehouses, military hospitals, and even an electric power plant. The old port of Lakki, the deepest natural port of the Mediterranean, was transformed by Mussolini into a new city with modern urban design of rationalist architecture, characteristic of the fascist period (Figure 7).



Figure 7. WWII infrastructures on the island of Leros

Numerous private collections as well as the Beleni's Tower collection with material from the Italian occupation and World War II are exactly the attestation of an era that has sealed the history of the island. During the Second World War, due to its many natural coves that provided safe anchorage to every warship, Leros was the second most bombed island in Greece after Crete. Worth mentioning is the battle of Leros that lasted 52 days, the last victory of the Axis and the last defeat of the Allies, during which the legendary Greek destroyer Queen Olga D15, who had successfully participated in many operations during the war, together with the British destroyer HMS Intrepid (D10) were sunk by German Junkers 88 bombers.

The importance and uniqueness of this island is certainly reflected underwater too. The sea area around the island is the only place where someone can find wrecks of Italian, German, British and Greek military ships and aircrafts together.

As far as the diving trails are concerned, in Leros the situation is a bit different. Wrecks are suggested to be visited separately as they are far from each other in most of the cases. Two groups of wrecks have been distinguished here too though, based exclusively on their location. One group includes wrecks lying at the gulf of Lakki and another wrecks around the north and east part of the island. For the first the port of Lakki will be used as a departure point, for the second, the port of Agia Marina is proposed, as it is situated at the eastern part of the island and closer to the second group of wrecks. A very brief presentation of the two areas will follow.



Figure 8. The suggested AREAS A & B of the island of Leros

1. AREA A – The zone with the largest concentration of shipwrecks on the island is of course the main port. There are four different sites here. First and foremost, the highlight of the island is the very important for the history of the Second World War Greek destroyer Queen Olga. Today lots of her parts are missing as they were taken by the locals during the difficult times after the War. A second wreck is the one of an American landing craft, which arrived probably after the War, as part of the Marshall plan for help. A metal antisubmarine net that, when stretched upon the entrance of the harbor, protected Lakki from the entrance of enemies and when lowered or moved, permitted friendly vessels to enter, along with an Italian vessel that assisted the laying of this net, are two more underwater sites.



Figure 9. Diver at Queen Olga

2. AREA B – It includes five wrecks that can be visited from Agia Marina as a starting point. An Italian barge for another anti submarine metal net that existed for the protection of the gulf of Partheni at north, a German bomber aircraft Henkel 111 at Blefouti bay, a German landing vessel near the islet of Stroggyli, an aircraft of Arado type at the island of Agia Kyriaki and, finally -a deep dive at 50 meters- a Junkers 52 airplane, sank because of fire near Ano Zymi at the east of Leros.

4. Similarities and differences

Both the cases of Fournoi and Leros have been selected by the Ministry of Culture thanks/due to their large concentration of UCH monuments - at least 58 at Fournoi and 9 -or maybe more- in Leros. The value of each region is indisputable for each respective period, in Fournoi from an archeological point of view, in Leros from a historical one. Both islands do not belong to the most famous Greek tourist destinations. Nevertheless, they have the capacity to become attractive diving destinations with an abundance of Underwater Cultural Heritage Sites, in combination with an attractive natural environment, several cultural assets and their social wealth. Promoting them as diving destinations could attract visitors who choose to travel based on the offer of alternative forms of tourism; it could also extend the tourist season, create new infrastructures and jobs and contribute to the improvement of the existing tourism, in the context of a sustainable tourism development in terms of environmental sustainability.

Despite their many similarities, the two cases exhibit specific features and significant differences. Most of them result from their difference in chronology: in Fournoi we deal with archeological evidence, in Leros on the other hand, with historical proof. The methodology that must be applied in each case is different: in the case of Fournoi we need to follow a strict archeological process, involving many professions and participants in the research, for several years and -in many cases- without definite results. For the recent wrecks of Leros on the contrary, research in historical archives or even through oral testimonials is enough to get a clear idea of the monument in question - which doesn't mean it is an easy task of course.

There are also differences in terms of the size of the wrecks and the volume of materials found: most of the times only the surface findings of an ancient shipwreck can be seen and further investigation and probably excavation is necessary -and this is the case of some of Fournoi shipwrecks- while in Leros the diver sees the whole wreck in most of the cases, or at least one gets a clear image of the monument one visits. In terms of material, the main finding in Fournoi is not other than amphorae or other ceramic vessels of different origins and chronology, metal/lead/stone anchors, building material and most probably wood in the future, while the WWII wrecks of Leros are made of metal and modern materials. The preservation of the metallic frame of the wrecks of Leros is of course problematic and obviously raises questions about the future of the sites.

Regarding the wrecks found in Leros, it is not of minor significance that the visitor can come across ammunition material and still active sea-mines, which can turn out to be very dangerous in case of undisciplined divers. Furthermore, in Leros, we have run into human bones -remains of the soldiers that have lost their lives during the several battles. Rule number 5 of the UNESCO 2001 Convention calls for carefully considering unnecessary impact, in calling for due respect of human remains and venerated sites. This, in combination with the fact that there can be survivors of those wrecks, is a factor that raises moral questions that must be taken under serious consideration. Anyhow, the Ministry of Culture aims to a “no-touch” approach for the preservation of both the sites in Fournoi and Leros.

Last but not least, since the goal of our efforts is to render these sites accessible by the public, laws and regulations must be enacted. In the case of Fournoi, the process is a bit more complex, as the model followed must be the one recently implemented in Alonissos, Persistera shipwreck, where after a State order that officially recognizes the area as Archaeological Site, particular regulations must be set. In the case of Leros, the wrecks that will be included in our proposal as diving destinations are already nominated as underwater monuments by a Ministerial Decision in 2003, as they have sunk at least 50 years ago. According to a new law voted in May 2020 (4688/2020), the visiting conditions of these shipwrecks are much milder in relation to Underwater Archaeological Sites, as the constant surveillance of the Ephorate is not necessary. Finally, the Ministry of Culture very recently, composed a list of 91 wrecks, out of which, eight are in Leros, giving the diving centers direct accessibility to the sites. A common law among the Ministries of Culture, Defense and Nautical Affairs -that are also responsible- is expected to be enacted soon.

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