# საწყალოსნო არქეოლოგია საზღვრებს მიღმა პროექტის აღწერა

## სოდერლინდი ულრიკა სტოკჰოლმის უნივერსიტეტი

სტატია ეძღვნება საქართველოსა და შვედეთს შორის ახლადწამოწყებულ პროექტს საწყალოსნო არქეოლოგიასთან დაკავშირებით. პროექტს აფინანსებს შვედეთის ინსტიტუტი (სტოკჰოლმი, შვედეთი).

2009 წელს ილიას სახელმწიფო უნივერსიტეტსა (საქართველო) და სტოკჰოლმის უნივერსიტეტს (შვედეთი) შორის დაიწყო ერთობლივი პროექტი საწყალოსნო არქეოლოგიაში. პროექტის ფარგლებში ჩამოყალიბდა ჯგუფი რომელსაც საქართველოს მხრიდან წარმოადგენს სამი სტუდენტი არქეოლოგიის დარგში და შვედეთის მხრიდან ერთი დოქტორი და ერთი სტუდენტი.

სტატია აღწერს ჯგუფის პირველ საქმიანობებს 2009 წელში და პროექტისთვის 2010 წელში დაგეგმილ სამომავლო მიზნებს. პროექტის ერთ-ერთ სამომავლო მიზანს წარმოადგენს არქეოლოგიის სტუდენტთათვის სასწავლო ცენტირს შექმნა თბილსისში, რაც ასევე გულსხმობს ყვინთვის კურსებს.

# Maritime Archaeology over the Borders-A Project Description

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## Introduction

This article is about a recently started project between Sweden and Georgia in the field of maritime archaeology. The project is funded by the Swedish Institute (SI) in Stockholm, Sweden. The two universities involved in the project is Stockholm University, Stockholm from the Swedish side and Ilia State University, Tbilisi from the Georgian side.

### The Beginning

The project started in 2009 when a group of students from Ilia State University came to Sweden with their assistant professor, the counter part in Sweden is PhD Söderlind, Ulrica.

The Georgian participants arrived in early May and the main goal for the Georgian students was to take diving courses in Sweden in the PADI-system. For the future of the project it was important for the students to learn to dive in cold and dark waters in dry suite. If one can do that, one can dive everywhere in the world. If one learns to dive in warm, clear waters with very good visibility and in wet suit, one can not manage to dive in cold, dark waters. It is much harder and more difficult to dive in a dry suit then in a wet suite and a lot more difficult to dive in dark, cold water with very limited visibility then in warm clear waters with a visibility up to 20-30 meters in all directions.

The diving courses took place at the dive centre DYKHUSET in Stockholm with Roger Hovind as the instructor. The Georgian students were in for a chock since the water outdoors was only +3 degrees Celsius. Learning to dive under such circumstances is not easy. Within a time period of two weeks the students managed to pass the first two courses in the PADI-system and got certified as Open water diver (OWD) and Advanced open water diver (AOWD). On an OWD certificate the diver is allowed to dive to the maximum depth of 18 meters and on an AOWD certificate the diver is allowed to deep dive below 18 meters.

The students also took part in excursions arranged by the Professor in maritime archaeology Rönnby, Johan, Södertörns University College, Stockholm. One of the excursions was to a place called Landsort that is situated far out in the Stockholm archipelago. The island is very remote and has a lot of archaeological remains from different time periods. Professor Rönnby, Johan took the group along with his students of maritime archaeology for a round tour of the island. The group spent a whole day on Landsort since the ferry communications is very scares in that time of the year.

The group also spent a day in the company of Professor Rönnby, Johan and his students on Birka where the students were mapping out the underwater bed. Today Birka carries remains from what use to be an important trading town during the Viking era. The town was established around 700 A.D and was abandon around 900 A.D. The town lost its importance during the 10<sup>th</sup> century when the city Sigtuna was founded and rose up to be the new important city for trade etc. Sigtuna is also considered to be the first Christian city in Sweden. Birka belongs to what in Sweden is called the Viking age and the location has been excavated on land several times since the 19<sup>th</sup> century. However most of the excavations have been carried out on land, and mainly by the department of Archaeology at Stockholm University. Very little has been done under the water surface so a lot of questions still remain to be answered. Birka was received the status of world heritage in 1993 (http://www.raa.se/cms/extern/se\_och\_besoka/ birka/birka.html).

Apart from these activities the group also visited the Vasa museum in Stockholm and was given a private tour of the museum and its magazines by the head of research

PhD Hocker, Fred. Vasa is a naval vessel from the 17<sup>th</sup> century and she sank on her maiden voyage in 1628. The reason why she sank is until this day very unclear. Vasa were refund by Mr Franzén, Anders in 1956 but Vasa did not break the water surface until the 24<sup>th</sup> of April 1961. The discovery and salvage of the ship makes her the only remaining intact 17<sup>th</sup> century warship in the world, that we know of today. Since Vasa sank on her maiden voyage in Stockholm Ström the ship was not fully provided and approximately 150 persons where aboard. The major part of the provision was going to be loaded aboard the vessel at Älvsnabben, where the remaining part of the soldiers and men also was going to come aboard. Even if Vasa did not make it even to her first destination the ship is today very important for maritime archaeologist all over the world (Söderlind, 2006).

Since the preservation conditions for organic material is very good in the cold, dark waters in the Baltic Area, Vasa is very well preserved both as a whole ship but also the personal belongings the 150 persons had taken aboard before they sat sail. The group got a very good insight in the different kind of organic materials that has been preserved and is both on display in the exhibition but also stored in the magazines of the museum. Among other things the group was given the opportunity to smell Rum from the 17<sup>th</sup> century. The head of research also talked about the difficulties and challenges the researchers and staff at the museum is facing in order to preserve the ship and other organic materials for the future.

Later the same year, in September 2009 the Swedish part of the group arrived in Georgia and to Ilia State Universities base camp in Grigoleti, Black Sea, along with the Georgian participants. The main task for the stay was for the students to learn scientific archaeological methods to work below the water surface and to get more skilled in diving. Here it is important to stress that diving for a maritime archaeologist is a tool for getting the work done. Basically the methods used for underwater documentation of a site is the same that one land, however, if the site is a shipwreck for example the methods has to be adjusted to the nature of the site. To work scientific under water also requires a lot more of the archaeologist than working on land. The archaeologist needs to be in control of her/his buoyancy, know where the diving buddy is, where the rest of the group is, keep control of the air supply and the bottom time. In addition to that, there is also equipment to keep an eye on, so they do not get lost. All this takes a lot of experience and the best way to get it is to be given the chances to practice, practice and practice some more.

The students was given tasks on land in order to in a later phase take it under water and do the same., for example to draw profiles and plans in different kind of scales on millimetre paper. The plans was divided into different sections and they where put together when every item was drawn. The drawings were then transferred on to transparent millimetre paper. One thing that the students found difficult was not to talk to each other during the work on land, since it is not possible to talk to each other underwater during the time the work is carried out.

### The Present

The group was very lucky since they received an invitation from Mr Delgado, James that is the current president for The Institute of Nautical Archaeology to visit the laboratory in Bodrum, Turkey. The laboratory in Bodrum is considered to be one of the world leading laboratory in conservation of water soaked artefacts and material. Part of the group spent three weeks at the laboratory in the beginning of year 2010.

Under the supervision of the head of conservation Mrs Rash, Kimberly the group members was taught the basic methods for conservation of wood, iron, marble and ceramics. To conservate water soaked material is very different from conservation of artefacts that has been in the soil in the ground. Conservation of iron caught the main interest of the group, even if working on ceramics also was highly appreciated. The group was given the opportunity to work on material from the Greece Bronze Age, via the Roman Period into the Byzantic time era. Visiting the maritime museum and have a chance to see the exhibitions on display along with the work on material from different time periods gave the students an insight in one of the most significant features of maritime archaeology. Namely the fact that maritime archaeology is not locked into one certain time period or geographical area. The sites (in this case sunken ships) decide for you what time period one is going to work on for the time being. This fact also requires a lot from the scientist/researcher since he/she needs to be very open minded in the work and let the material lead one where it wants to go. To work in this manner also means that the scientist/researcher usually needs to read a lot about different time periods. A very good opportunity to do so is to study at the library located at the laboratory, the library contains for the moment of approximately 7 500 volumes.

#### The Near Future

In May-June 2010 the Georgian students will be coming back to Sweden in order to take part in an excavation in co-operation with professor Rönnby, Johan at Södertörn University College, Stockholm. The site has not been decided yet, but most likely it is going to be an inn in the Stockholm archipelago. These small inns are located within 20 km from each other and can be dated to the Middle Ages – 19<sup>th</sup> century in Sweden. This inns was very important to the passengers travelling along the coast, they provided travellers with a place to rest and sleep, food and of course schnaps to drink. Very little research has been done in Sweden regarding this inns or small taverns even if they possess a great deal of research potential (Söderlind, 2008). It is also planned that the Georgian students will give a series of lecture about archaeology in Georgia and the Caucasus at Södertörn University College.

A part from the activities in co-operation with Södertörn University College it is also planned that the group will take part in creating an under-water park at Axmar Bruk, Gävleborgs parish, Sweden in co-operation with Länsmuseet, Gävleborg. It is very important for the students to take part in this work since it is important for them to see that maritime archaeologist do not only excavate under water but also work with preserving the cultural heritage under water for the interested divers that are not archaeologists. The park will consist of several signs that inform the diver what she/he sees under water. At Axmar Bruk there is remains from a wreck that is dated to the 16<sup>th</sup> century and remains from the production of iron from different time periods (personal communication, archaeologist Mr, Ulfhielm, Bo, Länsmuseet Gävleborg, 2009-12-28). A visit to the Åland Island is also planned in order to work in magazines and archives in Mariehamn.

It is also planned that the Swedish part in the project will return to Georgia sometime around September - October 2010. The idea is to set up a base at Tsikhisdziri Petra tshke. The site is a fort that dates to approximately 600 A.D and some excavation and investigations has been carried out in the fort; however the fort is not totally excavated. The Byzantic emperor Justinian founded a city at the location due to its military strategic location. The place was also an important place for trade, merchants travelled both on the waterways and by land. The route that combined the western part of Georgia with the other Byzantic provinces, Iran and Armenia. That made the location highly interesting from an economical point of view.

Just outside the fort is the shore line of the Black Sea, no surveys or excavations has been done under the water surface. After talking to local fishermen's we have indications of that it might be a foundation under water since the nets get caught in it. The fishermen's has also found loose findings of coins and amphora's. All this indicates that the sea floor bed is highly interesting from a maritime archaeological point of view. It is going to be very interesting to see what our investigation/excavation will bring to light from the underwater site.

## Long Time Goals

The project has several long time goals; one is the intention to start up courses in maritime archaeology in Georgia as a part of the education system in archaeology with the assistant from Sweden. One step in that direction is for the Swedish part in the project to write an introduction book in maritime archaeology for Georgia. Another goal is that it will be possible to start an introduction course in archaeology of Georgia and the Caucasus in Stockholm. One step in that direction would be the book that it is planned that the Georgian participants will write for Sweden.

Yet another long time goal is to create a Centre for Maritime Archaeology at a university in Tbilisi, Georgia. It is important that a centre will be create in the field sine Maritime archaeology creates lots of interest in Georgia. And that is not just because of the Black Sea, maritime archaeologist also works with lakes, streams, creeks and wet lands. In order to become a maritime archaeologist, first one becomes an archaeologist and then a maritime archaeologist since it is not possible to work as a maritime archaeologist if one first is not an archaeologist. When the centre is created it would be very good for the students if it is possible to arrange for a PADI-Instructor to come to Georgia in order to learn the new students of maritime archaeology how to dive. It would be very good to see the ones that are now the Georgian students working at this centre in the future with a new generation of students. We are not there yet, but we hope that this project will build the first solid foundation stones for a long lasting and flourishing co- operation between Sweden and Georgia in the field of archaeology and maritime archaeology.



Fig. 1 Two of the Georgian students of archaeology during their diving courses in Sweden in early May 2009. © Jaramillo, Rubi.





2. Assistant Professor Tskvitinidze, Zurab (to the left) and professor Rönnby, Johan (to the right) during a discussion on Landsort regarding the meaning of some foundations. © Söderlind, Ulrica.



Fig. 3 A student of maritime archaeology working on filling in the map of the findings after working under water at Birka. © Söderlind, Ulrica.



Fig. 4 The student group working on archaeological methods on land in Grigoleti, Georgia before taking it under water. © Tskvitinidze, Zurab.



Fig. 5 Two of the students working on drawing a profile on land before taking it under the water surface. © Tskvitinidze, Zurab.



#### Fig. 6

The group was taught the basic methods of conservation for example iron at the Institute of Nautical Archaeology in Bodrum, Turkey. The group members took great interest in the work. © Published with the courtesy of the Institute of Nautical Archaeology (INA), Bodrum,



Fig. 7

Another material the group worked on was ceramics, from the first step to clean the edges of the shards to reconstruction of the full item. © Published with the courtesy of the Institute of Nautical Archaeology (INA), Bodrum, Turkey.



Fig. 8

The group outside the INA in Bodrum. Top row, left to right, Donadze, Paata (Georgia), Söderlind, Ulrica (Sweden), Beritashvili, Ioseb (Georgia). Bottom row, left to right Jaramillo, Rubi (Sweden), Mshvildadze, Madona (Georgia). Published with the courtesy of the Institute of Nautical Archaeology (INA), Bodrum, Turkey.



Fig. 9 View from the fortress at Petra facing the Black Sea. © Söderlind, Ulrica



Fig. 10 Some of the artefact of ceramic that was found aboard the Vasa ship when the ship was undergoing archaeological excavation. © Söderlind, Ulrica

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