Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Switzerland and Albania

Swiss and Albanian archaelogists discover 8,500 year old pre-historic settlement

Article, 03.08.2023

University of Bern professor Albert Hafner confirms that a collaboration under the regional project EXPLO has resulted in ground-breaking findings from the village of Lin, near Pogradec on the Lake Ohrid shoreline

Prof. Dr. Albert Hafner during underwater exploration at the Lin site. ©University of Bern / EXPLO project University of Bern / EXPLO project

Through careful site excavations and advanced analysis the team of archaeologists have concluded that the palafitte settlement near Lin is the oldest known pre-historical settlement in Europe. Read our full exclusive interview with Professor Hafner.

Congratulations on the remarkable discovery of the oldest known settlement of its kind in Europe! How would you describe your initial response and excitement upon confirming the age and significance of the Lin Palafitte settlement?

One of the most important results of the EXPLO project is that the lake shore settlements of the region are much older than we expected. This had already been indicated by data from Ploča and Ohridati (both sites on the northern Macedonian shore of Lake Ohrid) and Dispilio (Greece, Lake Kastoria). However, the oldest dates

from Lin are now another 100 to 200 years older and these new radiocarbon dates have of course made us very happy! We are approaching the time mark 6000 B.C.! The lakeside settlement of Lin on the Albanian shore of Lake Ohrid will certainly play an important role in research from now on.

Your findings indicate that Lin area on the shore of Lake Ohrid served as a hub for the development of agriculture, craftsmanship, and fishing around 8,500 years ago. What is the specific evidence for this conclusion? And what does it tell us about the daily lives of the people who lived there?

Agriculture and animal husbandry originated in the Near East about 10,000 years ago and later spread through Anatolia, the Aegean Sea and Thessaly to the region in the tri-border area of Albania, Greece and North Macedonia. The latter played a crucial role in the spread of agriculture and livestock towards Central Europe. In simple terms, there were two main routes along which this innovation spread: the first, known for a long time, followed the course of the Danube into the northern Alpine region. The second route was discovered much later. It led through the eastern and western Adriatic region and across the large islands of Sardinia and Corsica towards the mouth of the Rhone. From there, agriculture and livestock spread northward. So, in the southern Balkan area, the spread of the new way of farming was divided. Moreover, we wonder how it is possible that cereals adapted to dry areas could become so quickly familiar with the conditions in the rather high altitude, high precipitation lake area in Albania, Greece and North Macedonia. The daily life of these people was the same as in all early agrarian societies in Europe: it was probably a permanent struggle for survival. With a mixed economy based on agriculture and animal husbandry, but also including hunting wild animals, fishing and gathering plants and small animals, they tried to be as diversified as possible.

What can you tell us about the technology and methods employed during the excavations and the analysis? How sure can we be that the timing is correct?

In both the land excavations and the underwater excavations, we proceed very carefully and separate the individual layers. This has been common practice in archaeological research for a long time. What is new is that we do the mapping digitally, using high-precision satellite GPS and, above all, drones. For dating, we use two methods. For the rough determination, the radiocarbon method is applied. It allows to determine organic material such as wood to 1-2 centuries. The other method is dendrochronology, which allows accuracy to decades (when combined with the radiocarbon method). In the best case, dendrochronology can provide data accurate to the year. With some fortune, we will be able to do this for the first time in the EXPLO project for the Balkan region.

This groundbreaking discovery came after a collaboration with of Albanian archaeologists with your team from the University of Bern. How did this partnership contribute to the success of the excavations, and what challenges did you encounter during the research process?

Our first activities were with partners in North Macedonia and we also worked closely with the Greek EXPLO team. From 2018, we established first contacts with Albanian colleagues. Since then we have a very good cooperation and in the final phase of the EXPLO project we are focusing on Lin in Albania, because we hope that this site will be the missing link between the Greek and the North Macedonian sites that we worked on first.

Your findings suggest that the Lin Palafitte settlement is even older than similar ones found in southern Italy and throughout Europe. What unique features or characteristics does this settlement exhibit that set it apart from others of its time?

At the moment, this assessment is based on radiocarbon dates from single piles. The excavated sections in all lakeshore settlements in the Mediterranean and Balkans are too small to identify structures. We have now encountered palisades in Lin for the first time in 2023 and we may be able to decipher parts of the settlement architecture. Further statements are currently not possible.

Everyone in Albania starting with the Prime Minister, the prefect of Korça, and also many researchers and media outlets have reacted positively and excitedly about this news. They see potential for this discovery to become a new landmark for tourism in the region of Pogradec and Korça. How can this archaeological site be preserved and presented to the public to showcase its historical and cultural significance?

The Lin site is currently located in 3 m of water depth and on land under farmland, also very deep in the ground. So, unlike ancient ruins, it is not directly visible. On the other hand, the exploration of submerged settlements offers a great deal of information on everyday life that ancient ruins cannot provide. In the Alpine region, the lakeside settlements are UNESCO World Heritage Sites, the sites in the lakes in the Balkans have the same quality! The ideal would be some kind of information center for the region, drawing attention not only to Lin, but to all lakeside settlements in Albania and the wider region. For example, our colleagues from Oxford are analyzing the sediments from Lin and Ploča and can tell very precisely from the preserved plant remains and from animal bones what was eaten by the populations of that time. We have new data on sites in the Korča Basin. Further analysis shows how people interfered with the environment and what relationships people had with other regions. Radiocarbon dating or dendrochronology are complex methods, but they are explainable. Translating the wealth of information into an educational exhibition concept actively involves visitors. They learn something and many people today want to acquire new knowledge during their leisure time. Modern museums pursue such concepts and visitors to the region would certainly pick up on interesting, educational information. However, one has to be aware that this also requires investments and permanent financing in order to have a sustainable and attractive information center.

As this research sheds new light on the history of European agriculture and human settlements, what do you hope will be the broader impact and significance of these findings for the field of archaeology and our understanding of prehistoric

civilizations?

The project as a whole aims to better understand human-environment interactions of early agrarian societies. How did people use the land back then, why did they settle here and how did they deal with crises. Actually, these are the same questions we ask ourselves today. We also want to show what great developmental steps mankind has made in just a few thousand years. The success story of the first farmers led to larger and more complex societies, technical innovations, but also to huge populations, serious problems with the environment, problems with access to resources of all kinds and global migration flows.

What are the next steps for your team? Is there more to be discovered in this area and what are you planning to address in future excavations?

With the EXPLO project, we can still carry out excavations in Lin in 2024. We would like to deepen what we have started in 2022 and 2023. We are trying to initiate further projects in the region, but this requires new financial resources. The excavations are costly and cutting-edge research today is always a question of money. In the Alpine region, research has been going on in lakeside settlements for 150 years. The lake area in Albania, Greece and North Macedonia is the second most important region in Europe after the Alpine area with about 1,000 sites and it is far from being explored. It still offers a great deal of potential to generations of researchers.