

## **The Montenegrin Maritime Archaeological Rescue Project**

### **Season One**



### **Introduction**

The inaugural season of the Montenegrin Maritime Archaeology Rescue Project (MMARP) took place August 23rd-September 12th, 2010. As one of the first maritime archaeological projects ever to take place in the country, involving institutions that had not previously worked together, the first season was inevitably exploratory. Nevertheless, substantial progress was made towards its key aims: to support the development of a professional maritime archaeological structure in Montenegro and to document and conserve threatened underwater archaeological sites in the country.

After an initial set-up period, including meetings with key Montenegrin Institutions, the fieldwork fell into two halves:

1. a week spent surveying, drawing and photographing archaeological remains in Maljevik Bay, where the discovery of monumental stone blocks in August 2009 had triggered the inception of the project;
2. a second week carrying out initial survey and trial excavations at the well-known harbour/anchorage site at Bigovica Bay.

The project consisted of 12 days of diving from the recreational dive boat Downunder, based in Bar Marina. The team was comprised of 11 divers, who, combined, conducted 191 dives total, spending over 174 hours under water.

## **Project Structure**

True and equal collaboration lies at the heart of MMARP. The Montenegrin and UK-based archaeologists worked closely and effectively together on and off site, sharing food and accommodation, as well as exchanging knowledge and experience. For most of the UK archaeologists it was the first opportunity to work in this relatively unexplored part of the Mediterranean coastline and to come to grips with the extraordinary richness of the heritage of the area, as well as the many threats and challenges to the protection of ancient sites, on shore and off shore. For the Montenegrins, this was the first formal maritime archaeological project on their Montenegrin coastline, providing an opportunity to get to know new methods and technologies.

## **Discoveries at Maljevik**



In Maljevik Bay, the architectural stones discovered last year were planned, drawn and photographed in detail. The stone of the blocks has been confirmed as local red limestone, widely used in medieval church building along the southern Adriatic coastline. Close examination revealed that they had been carefully worked, suggesting that they were made to order for use. Their date and the identity of this building are still to be established with certainty. One possible explanation may be a connection with the medieval Benedictine monastery of Ratac that lies on the coast less than 3km to the south, where excavations have revealed the foundations of a very large church, abandoned before completion. Could the blocks at Maljevik have been destined for use here?

A systematic underwater survey of the wider bay revealed extensive spreads of antique pottery and at least one probable Roman wreck site of the 2nd to 1st centuries BC, marked by large numbers of amphorae sherds. A second scatter appears to be later Roman in date.



### **Bigovica**

The small inlet at Bigovica, a short distance down the coast to the south of Bar, has been well-known for many years as one of the richest maritime archaeological sites in Montenegro, with large quantities of antique pottery and coins dating from Hellenistic times, through the Roman period into the middle ages. This notoriety has also led to it being a focus of interest for looters, who are known to have taken large numbers of amphorae and other objects from

the site over the past forty years. It is therefore an urgent priority for documentation, research and protection.

A detailed survey of the bay revealed a thick spread of pottery, much of it concentrated along its southern shore and in a central depression formed by a shallow curving shelf in the seabed. Plans were made of the underwater topography and main concentrations of pottery, and limited diagnostic pieces were collected for analysis. Excavation of test pits revealed a substantial depth of archaeological material particularly towards the inner reaches of the bay, indicating that much is likely to survive buried beneath the sea floor at Bigovica, notwithstanding the devastation caused by looters.

Trial excavations in the central portion of the bay revealed the remains of a portion of a wooden hull. The remains extend for approximately 7 metres, and 8 frames, up to 5 strakes and portions of the keel are present. Its size and construction suggest that it is the partial remains of a small vessel, no more than 500 years old. The remains were partially uncovered and recorded in detail, with both measured plans and a photographic mosaic. This proved to be an ideal training exercise for the UK and Montenegrin students.

The finds at Bogovica are complex and multi-layered. They will require sustained enquiry and fieldwork to characterise fully their date and character. It remains uncertain at present to how great a degree the antique pottery is the result of shipwreck events or was simply the result of frequent and repeated use as a point of transshipment. To gain a proper understanding of this latter point, it will clearly be necessary to carry out both terrestrial and extensive maritime survey in future seasons.

### **Geomorphology and GIS**

The development of a GIS spatial database of the archaeology of the region around Bar is a fundamental part of MMARP's methodology. This provides both a tool for analysis - combining satellite data, geomorphological information, aerial photography, historic maps and known archaeological sites - and a format for recording new archaeological observations. All data collected in the field in 2010 was tied to GPS readings that were then entered into the GIS providing an absolute location for the features recorded during the season.

In parallel with the maritime archaeological survey and excavation, Dr Mike Morley of Oxford Brookes University has commenced a programme of geomorphological study of both Maljevik, Bigovica and the Bar locality more generally. This aims to gain a soundly-based understanding of Holocene landscape change, with an emphasis on the interaction of human

society and the landscape over the past 3,000 years. This covers both an investigation of evidence for sea-level change, as well as changes in coastal geomorphology, most notably the effects and rates of alluviation. In 2010 this involved initial mapping of the geomorphology of the area and the sampling of a closed 'polje' near Bigovica, which has high potential for preservation of a palaeoenvironmental sequence that should reveal much about environmental change over recent millennia.

## **Conclusions**

The first season of MMARP has been an outstanding success, in bringing together knowledge and expertise from different parts of Europe with the aim of the better understanding, documentation and preservation of the extraordinary and fragile coastal heritage of Montenegro. As well as beginning to fill a gaping hole in the archaeological exploration of the Eastern Adriatic, it has brought to the attention of the wider Montenegrin and international public the value and true significance of the maritime heritage of this country so rich in remains of the past. It represents the first step in a long journey, which will hopefully lead to the development of permanent Montenegrin institutions and systems for the protection of this irreplaceable resource.

Plans are presently being drawn up for the 2011 season. This will last for longer, probably around 4 weeks, and will involve the participation of more students from both Montenegro and the UK. The work of surveying key coastal archaeological sites within the Municipality of Bar will continue, with Bigovica, as the richest and most vulnerable site, being of primary importance. Work there will continue to characterise both the underwater and terrestrial archaeology, and to develop a long-term strategy for conservation and protection. The geomorphological survey will be extended, involving coring transects in selected high potential locations.

## **Supporting Institutions and the Team**

MMARP was supported by a wide range of public and private institutions in 2010, chief amongst which was the **Headley Trust**, without which the project would not have been possible. Also crucial was the support of the **Montenegrin Ministry of Culture**, which supported the project in 2010 and have committed to further support next year, including diving training for a further 10 Montenegrin archaeologists. The Montenegrin Centre for Archaeological Research in Podgorica provided additional funds, while the Centre for Diving

and Demining in Kotor Bay (a governmental institution) provided equipment without charge. Finally, the RPS Group (Planning and Development) provided further sponsorship.

The University of Southampton, as well as providing the services of Dr Lucy Blue and a number of MA students, provided further equipment. The British Embassy in Montenegro also provided formal support to the project and the Diving Club of Montenegro provided important logistical support.



The team, representing a collaboration between the University of Southampton and the Museum of Bar (supported by the Montenegrin Ministry of Culture), with the additional support of RPS Group, was as follows:

Mladen Zagarcenin (Museum of Bar), **Dr Lucy Blue** (University of Southampton), Dr Athena Trakadas (Viking Ship Museum, Denmark), Charles Le Quesne (RPS Group), **Dr Mike Morley** (Oxford Brookes University) plus Dejan Draskovic, Petra Zdravkovic, Nikola Borovinic, Ivana Medinica (Montenegrin graduate students), and Ania Rutter, Quinn Saint-Armand, Angela Rodriguez-Schrader (all University of Southampton students), Ania Kotarba-Morley (University of Oxford) and Matt Dames (film-maker and recent graduate from Southampton). We are grateful to Zeljko Dragutinovic, captain of the Downunder dive boat, who provided his services at a reduced rate and was also a key part of the team.