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Fieldwork: remedial investigations on heritage sites

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In the year 2000 I participated in a mapping, salvage excavation and restoration of a grave field with stone-settings in southern Sweden. The reason for the work was damage by deforestation and soil preparation in the grave field. The work involved clearing away forest residues, mapping graves and restoring plowed stone fillings. The archaeological investigations were confined to a few stone-settings, all of which were damaged by soil preparation. The results showed that the graves can be dated to the early iron age. In addition to burnt bones, findings included iron rivets, a bent knife and pottery shards. The detrimental effects of forestry operations were evidenced by damaged stone fillings and exposed cremation burials pits. Furthermore, the pressure of the heavy forest machines had caused damage to the ground. The entire soil conditions of the grave field have changed, leading to faster degradation of the contents of the graves.

In the years 2005 and 2006, I participated in a research study of a bronze age hill fort in the Republic of Khakassia in Russia. The purpose of the project was to increase awareness of a type of hill fort, known as "Sve", found in the region so that they can be protected from looting and vandalism. The study was part of an international research project. The ancient hill fort is located on the island Khamenij Ostrov (Stone Island), in the river Yenisei flowing through Khakassia in southern Siberia, not far from Mongolia. The area is characterized by mountain steppe with very cold winters and very hot summers.

Figure 1. Khamenij Ostrov from the north with Yenisei in the foreground.

The Swedish participants worked with digital mapping, documentation, phosphate mapping, sampling and film production. In 2006 the project also used ground penetrating radar to examine how they are constructed. The hill fort on Stone Island stretches over about 24 hectares, and the plan was that phosphate mapping and ground penetrating radar could be employed to identify locations suitable for archaeological excavation. Phosphate mapping and ground penetrating radar are methods suitable for large areas. In previous seasons the hill fort wall was archaeologically examined. The hill fort is visible as an approximately 1.4 kilometres long earthwork which has prevented access to the hill fort plateau from the east. The west side of the island is bordered naturally by up to 100-meter-high cliffs.

Figure 2. Surveying in the company of wild horses.

During the excavation, it was found that the hill fort is built of stone and earth and has had a superstructure or palisade of wood. Burials from the 1100s BC as well as one of the three paved ramps leading up the hillside has also been investigated in the project. The remains are dated mostly to the Tagar culture, a nomadic Scythian equestrian culture of the millennium before Christ. The project is also working to clarify the cultural influences and migration in the region. Some of this work was done by DNA analysis of bones from horses. My role was to contribute with consultation, surveying, sampling, digital documentation and mapping. The work involved documentation of archaeological objects, trenches, topographic objects, points for phosphate samples and ground penetrating radar tracks.

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Figure 3. Phosphate sample analysis in the field.

At present, I work as a consultant, contract archaeologist and cultural heritage advisor, mainly on large scale infrastructure projects.

Clas Ternström joined the Blue Shield Expert Network in 2017

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