The conquest of Dacia was the last great expansion of Rome. Domitian’s failure to annex Dacia and subsequent Roman military defeats at the hands of the Dacians made the Danube frontier a target of essential importance for the Empire. It took Trajan, one of Rome’s greatest military minds, two wars (102 AD and 106AD) to conquer and subjugate the mighty Dacians.

Our workshop aims at bringing the Daco-Roman synthesis to life. It is an archaeological program that is meant to be both experimental and experiential. All our participants will experience life as a Daco-Roman, working the ovens and the forges, building Late Iron Age workshops and houses, training in the various weapons and tactical martial fighting techniques of the day. Students and participants will make the intellectual and phenomenological journey from the academic, to the experiment and to the experiential, in the fields of pyrotechnologies, domestic crafts, weapons and tactics, and finally prehistoric building techniques and architecture.

Duration: 4 weeks
Costs: US$1985 for 5 weeks. It includes:
- Registration taxes
- All the prime materials
- All the gear
- Lectures and demonstrations
- Full room and board)
Workshop: Experimental and Experiential Archaeology – Living the Daco-Roman Synthesis

Period: Late Iron Age – Imperial Roman

Workshop period: June 02 – June 29, 2013 (4 weeks)

Historical and Archaeological Background:

By the beginning of the first century AD, the Roman Empire reached its zenith. The conquest of Dacia was the last great expansion of Rome. Since the first half of the 1st century BC, under the great king Burebista, the Dacians start to get involved in Roman politics. Domitian’s failure to annex Dacia and subsequent Roman military defeats at the hands of the Dacians made the Danube frontier a target of essential importance for the Empire. It took Trajan, one of Rome’s greatest military minds, two wars (102 AD and 106AD) to subjugate the mighty Dacians, or as Herodotus described them, “the bravest and fairest of all the Thracians”. The Dacians were the only (and last) entity left in Europe to pose a real threat to Rome… culturally, economically, politically and military.

The synthesis between Dacia and Rome, from the conquest in 102/106 until the Aurelian retreat in 271/275, sustained the Roman Empire for another two centuries. Dacians are the people most immortalized in Roman imperial statuary. The Transylvanian gold has kept Roman economy out of bankruptcy at the same time as the Dacian auxiliaries have manned the Imperial armies to the point of having a emperor of Dacian origin, Maximinus Thrax.

Workshop Description

Our workshop aims at bringing this synthesis to life. It is an archaeological program that is meant to be both experimental and experiential. We bring together archaeologists and craftsmen in order to recreate actual objects found in excavations and Late Iron Age and Imperial Roman techniques and technologies. At the same time, all our participants will experience life as a Daco-Roman, working the ovens and the forges, building Late Iron Age workshops and houses, training in the various weapons and tactical martial fighting techniques of the day. Students and participants will make the intellectual and phenomenological journey from the academic, to the experiment and to the experiential, in the fields of pyrotechnologies, domestic crafts, weapons and tactics, and finally prehistoric building techniques and architecture.

Pyrotechnologies

The pyrotechnology section of the workshop deals with technologies that employ fire as a means to transform matter. Our focus is twofold: metal and ceramics. We will experiment with Late Iron Age metal technologies, going through all the stages of the transformation: from roasting the iron ore, to making quick lime to use as flux, to reducing the ore to produce sponge iron, then the bloomer is transformed into wrought iron that will
be forged into iron artifacts, ranging from swords and arrow points to tools and jewelry. We will also melt and cast iron, copper and bronze in Late Bronze Age and Iron Age type furnaces.

The ceramic manufacturing aspect of the pyrotechnology section will take the participants through all the stages of pottery making. We’ll begin by extracting and cleaning the clay, making the tools that we need and then manufacturing Late Iron Age and Roman vessels either free hand or using a slow wheel. We will experiment with different types of surface treatment and various ways to apply heat. For the purpose of firing the pottery, we will build three distinct environments: a ceramic firing pit, a Dacian (LIA) and a Roman oven. By the end of the workshop, we will be eating and drinking out of our own vessels, using our own utensils, all of them Late Iron Age style!

Domestic Crafts

The domestic crafts section of this workshop focuses around leather and bone as experimental materials. We will try to reproduce bone household items, ranging from needles to spoons, games, combs, and jewelry. We will go through the entire process, from the raw, fresh bone to the hardening and various manufacturing techniques. We will explore how different types of bone perform both under manufacturing and daily use conditions.

Leather works will be linked mostly to the manufacturing of various pieces of armor. We will not process the hides, but we will work low processed leather. We will experiment with various material variables (such as toughness, strength, elasticity, hardness) in order to optimize the target qualities of the final object. We expect to complete from beginning to end at least two full sets of armor: a Sarmatian riding scale armor and a Dacian infantry “segmentata” armor. The learning process we’ll take us through the manufacturing of smaller objects and jewelry as well as the larger, more intricate artifacts.

This year, we will also introduce weaving and spindle work in our workshop. Participants will attempt to make thread from wool and then build a static LIA loom in order to weave various simple pieces of cloth.

Weapons and Tactics

Our weapons and tactics aspect of our workshop revolves around the Dacian Wars and the battles between the Dacian and their allies against the Roman Imperial armies, their legions and auxiliaries. At the same time as actually manufacturing them, participants will learn to use several of the weapons from these battlefields: the Roman gladius; the Dacian sica and falx; Sarmatian bows; battle slings; round, oval and square shields.

Concurrently with the martial practices, the participants will also receive tactical training, in order to experience life as a Roman and Dacian soldier. We will train to maneuver as Roman tactical units and test the strength and weaknesses of such formations. At the same time, we will also train as Dacian warriors, the most efficient European “barbarians” in breaking Roman formations. Keep in mind that the helmet and shield reinforcements as well as the “maneca segmentata” were implemented into the Roman heavy infantry armor in response to the Dacian falx.
Prehistoric Architecture

The experimental study of prehistoric architecture and building techniques is more of a long term endeavor. We are interested in the destruction patterns of such structures. Our goal is to generate in a controlled environment the remains we find in excavations. As a result, we will build several wall fragments and small houses in a wattle and daub technique, and we will destroy them through different techniques while recording the result. We are also interested to explore taphonomic processes that would impact the partially and/or completely destroyed wattle and daub elements and structures.

Participants will be involved in all stages of the experiment, from collecting the clay and manufacturing the daub, to creating the wattle infrastructure and apply the structural clay, to the destruction process and the experimental archaeological recording of destruction results.

Research team:

1. Project Director: Prof. Andre Gonciar (Director, Archaeological Techniques and Research Center, ArchaeoTek – Canada) – archaeology, pyrotechnology, prehistoric architecture, tactics
2. Dr. Zsolt Nyaradi (Expert Archaeologist – Haaz Rezso Museum of History and Ethnography, Odorheiu Secuiesc, Harghita County, Central Transylvania, Romania) – archaeology, bone work, weapons and tactics
3. Oprá Imre (Field Archaeologist, TDA, Romania) – archaeology, leather work, Sarmatian weapons, tactics
4. Levente Zolya (Field Archaeologist, TDA, Romania) – archaeology, sword blacksmith, weapons and tactics
5. Laura Iesean (ceramicist) – ceramic technologies

Bibliography:


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