

VASAGÅRD ARCHAEOLOGICAL PROJECT, DENMARK

Course ID: ARCH 365W

June 17–July 14, 2018

FIELD SCHOOL DIRECTORS:

Dr. Finn Ole Nielsen, BARC-Bornholm Museum, Denmark (fon@bornholmsmuseer.dk)

Dr. Poul Otto Nielsen, National Museum, Denmark (poul.otto.nielsen@natmus.dk)

Dr. M. Nicolás Caretta, BARC-Bornholm Museum, Denmark (nc@bornholmsmuseum.dk)

MSc. Michael Thorsen, BARC-Bornholm Museum, Denmark (mst@bornholmsmuseum.dk)



**Tuition covers accommodations, health insurance, instruction & 8 semester credit units.
Students are responsible for cost of all meals.**

INTRODUCTION

Neolithic settlements are among the most frequent types of prehistoric sites. Yet few have been investigated in the Baltic region. Scholars have incomplete understanding how Neolithic sites were built, how different parts functioned and what activities took place, or how circular structures (identified through timber postholes in a circular form) had developed. This project aims to investigate these issues at Vasagård, a settlement on the island of Bornholm (Denmark) that corresponds chronologically to the Neolithic period c. 3500-2700 BCE.

The Neolithic dwellings at Vasagård and cultural layers fall broadly into two periods: (1) Early Neolithic B/C to Late Funnel Beaker culture; and (2) Middle Neolithic A-V to Middle Neolithic B-I. The Vasagård Archaeological Project aims to seek more detailed answers to specific questions at the sites and from those, to extrapolate about cultural traditions at the Baltic and North European Neolithic Period. Our goal is not only to explore the richness of the archaeological materials found on Vasagård but also the

type and history of interactions among different groups/farming communities in the Baltic, their technology, economy, religion, and social organization.

Vasagård is divided into two distinct sections: (a) Section West with a tomb system, where a dolmen and a passage grave are present and (b) Section East with a settlement system. It is important to note that the proximity of a causewayed enclosure, graves and settlement is unique to the period. During the 2007 excavations of the East and West Enclosures, it was determined that the grave system was replaced by a stockade. The East Enclosure enclosed an approximately 4-hectare area and West Enclosure, a somewhat larger with about 7 hectares area. On each side at least 6 palisades and 3 phases of construction can be detected. Inside and within the palisade fence there is a settlement with traces of burnt offerings - cereal, bones and flint tools. So far, no traces of the characteristic two-aisled longhouses were identified; however, traces of at least 9 circular timber circles were found, seven on the east and two in the West site, but there are certainly more.

During excavations in 2013-2017, nearly 300 broken and complete flat stones were recovered, engraved with patterns of radiating straight lines. Dubbed 'sun stones' or 'solar stones', archaeologists at the Bornholm Museum dated those to c. 2900 BCE. They suggested that these artifacts were part of rituals carried out by Neolithic sun-worshippers. Other engraved stones include symbolic maps of local landscapes, and these were possibly used in rituals by individuals who hoped to magically influence the sun and thus fertility of their farmlands. Our current working hypothesis is that Vasagård was established by a group of early farmers who constructed a fenced stronghold with one public building, possibly a temple. The ornamented wall of the temple can be compared with similar finds at the site of Schalkenburg in Sachsen-Anhalt (Germany), suggesting ritual use.

The main objectives of the 2018 season are to engage with excavations at one of the causewayed enclosures and the circular structures within the site, where conditions for the preservation of organic material seem especially promising. A special find from the previous season was composed of an assemblage of seeds and ceramics, that corresponds to the Funnel Beaker Culture in other parts of Denmark and overlaps in time with the Pitted Ware Culture and the Early Battle Axe Culture (Middle Neolithic A-V and Middle Neolithic B-I). As the top soil and the Cultural Layer I were already removed in previous seasons, our interest will particularly focus on Cultural Layer II (MN A III) and at structure XIII.2 in Vasagård west. We want to understand the deposition process of the layers and the differences in content in contrast with other layers. It is also of interest to the project to understand the time span of the deposition process of each layer.

ACADEMIC CREDIT UNITS & TRANSCRIPTS

Credit Units: Attending students will be awarded 8 semester credit units (equivalent to 12 quarter credit units) through our academic partner, Connecticut College. Connecticut College is a private, highly ranked liberal arts institution with a deep commitment to undergraduate education. Students will receive a letter grade for attending this field school (see grading assessment and matrix). This field school provides a minimum of 160 direct instructional hours. Students are encouraged to discuss the transferability of credit units with faculty and registrars at their home institutions prior to attending this field school.

Transcripts: An official copy of transcripts will be mailed to the permanent address listed by students on their online application. One additional transcript may be sent to the student's home institution at no additional cost. Additional transcripts may be ordered at any time through the National Student Clearinghouse: <http://bit.ly/2hvurkl>

PREREQUISITES

There are no prerequisites for participation in this field school. Field archaeology requires a great deal of physical work and exposure to the elements, and thus requires a measure of acceptance that this will not be the typical university learning environment. Work in field archaeology requires endurance, discipline, and attention to detail.

DISCLAIMER—PLEASE READ CAREFULLY

The average summer temperature on the island is 21°C/68°F. Although summers in Bornholm are pleasant, weather conditions may change. Students should plan accordingly by bringing clothes and sunscreen suitable for hot, sunny, humid weather, but should also consider the possibility of rainy, windy, and chilly days.

It is important to remember that field work in Bornholm implies a high level of outdoor physical activity, including walking, lifting, shoveling, troweling, and kneeling. Participation in the project is not recommended for individuals with solar allergies or other special illnesses that might be exacerbated during intensive outdoor activities. Working conditions also include digging in soil and contact with human remains that have been buried in the soil. All injuries or allergies (however minor) should be reported to one of the field school directors. An up-to-date tetanus shot is necessary.

If you have any medical concerns, please consult with your doctor. For all other concerns, please consult with the project director.

COURSE OBJECTIVES

For the 2018 season, participants in the Vasagård field school will take part in excavations of the main sections of the enclosure. The season will cover the following three modules:

1. Fieldwork:

- Field archaeology and finds processing methods, considering the specifics of excavating a Neolithic settlement
- The archaeology of the Neolithic period in Bornholm with focus on Neolithic settlement patterns, activity areas, pottery, and lithic and other archaeological material
- Excavation: Students will be involved directly in the systematic excavation of archaeological remains and basic excavation tasks such as using proper excavation tools and techniques, following excavation procedures, recognizing artifacts and ecofacts, and distinguishing archaeological contexts during their involvement in excavation activities.
- Basic field documentation tasks during an ongoing excavation project such as using measuring and documentation tools, and creating written, graphic and photographic record
- GIS and its applications in archaeology
- Finds processing and documentation procedures such as cleaning, sorting, labelling, documenting, storing archaeological finds, flotation, processing soil samples, studying and recording Neolithic pottery, and so on
- Sampling: Students will receive training on the types of samples that might be collected for paleobotanical research and the information that can be gained from such sampling. They will learn how to collect such samples and will be able to put this into practice during excavation
- Recording: Throughout excavation and post-excavation analysis, students will gain experience in detailed recording techniques necessary for optimum information recovery. This will include detailed GPS recording of each excavation for digital mapping and the collection of archaeological material information before valuable information might be lost

- Photogrammetry: Students will be taught the basic principles of photogrammetry and practice it by maintaining a photogrammetric record of the areas they excavate.
- Post-excavation analysis: Students will gain experience with post-excavation analysis during the fieldwork by carrying out analysis of the material they excavate

2. Lectures, workshops and field training on prehistoric and field archaeology, finds, and samples processing and documentation. Lectures on related topics will be given by guest professors and basic courses in technical skills of GIS, Photogrammetry, use of Total Station will be given as part of the field and laboratory training

3. Visits to archaeological sites in the island and the archaeological storerooms of the museum, which will provide the students with a comparative perspective from other sites of the materials they will be working with.

COURSE SCHEDULE

The Field School schedule consists of Four Units:

Unit One—Theoretical module consisting of three components:

- Lectures and instructions about the field methods and practices;
- Lectures about different aspects of the archaeology of Denmark, Bornholm, and the settlement context;
- Lectures about the history and archaeology of the Baltic region.

Unit Two—Practicum consisting of two components:

- Fieldwork including basic practices of excavation and archaeological records;
- Workshops dedicated to primary archaeological finds processing and documentation.

Unit Three—Visit to sites accompanied by lectures, presentations and behind-the-scene visit to sites of historical/archaeological significance, such as the Neolithic site of Ringeborg, the Iron Age site of Madsebakke, and the medieval Castle of Hammerhus.

Unit Four—Assignments will be allotted to all students, which will consist of editing and processing students' field documentation (field journal, context sheets, drawings, photos, and so on.), and preparing presentations and reports.

Date	Morning	Afternoon
Arrival		4.00 pm—pick-up from Rønne airport or ferry. arrival at the guest house. Welcome meeting.
Day 1	Orientation at Vasagård archaeological site. Instructions for housing and field work: hygiene, health, and safety at the site. Basic field methods and practices for excavation and documentation. Use of tools and working techniques.	Visit to: Bornholm Museum <i>Lecture: Neolithic in Denmark and Bornholm.</i> <i>Reading from:</i> <i>Jensen, Jørgen</i> <i>Hvass, Steen and Birger Storgaard (eds.)</i> <i>Lecture: Archaeological Project (VAP)</i> <i>Archaeological Project.</i> (At Bornholm Museum)
Day 2	Activity: Introduction to the Field Journal; Contextual Sheets, Log Book, and Other Forms. (At Vasagård and laboratory)	<i>Lecture on Basic Methods for Uncovering, "First Aid", Consolidation in Situ, Cleaning, Sorting, Labelling, Documenting and Storing Lithic and Ceramic Artifacts in the VAP.</i> (At Bornholm Museum)

Day 3	Activity: Excavation—Site recognition, Three-Dimensional Positioning of Finds, Features and Structures. Principles of How to Use a Total Station. (At Vasagård and laboratory)	<i>Lecture: Horizontal and Vertical Stratigraphy.</i> <i>Reading from: Dafydd Davies.</i> (At Bornholm Museum)
Day 4	Activity: How to draw a ground plan/elevation plan/cross-section using scale excavation (At Vasagård)	<i>Lecture: Danish Pottery and chronology in Denmark during the Neolithic.</i> (At Bornholm Museum)
Day 5	Activity: Excavation sampling in archaeology. (At Vasagård)	<i>Lecture: Danish Lithic industry in Denmark during the Neolithic.</i> (At Bornholm Museum and laboratory)
Day 6	Archaeological materials. Bornholm Museum Warehouse	Evening off
Day 7	Day off	Day off
Day 8	Activity: Excavation. (At Vasagård)	<i>Workshop: Finds Processing & Flotation</i> (At Bornholm Museum and laboratory)
Day 9	Activity: Excavation. Post-excavation work and analyses. Field work Instruction: Principles of field Photogrammetry. (At Vasagård)	<i>Lecture and Workshop for cleaning, sorting and drawing of ceramic and lithic artifacts.</i> (At Bornholm Museum and laboratory)
Day 10	Activity: Excavation (At Vasagård)	Laboratory*: cleaning, sorting, and drawing and /or photography of ceramic and lithic artifacts. Recording information: database, journal.
Day 11	Activity: Excavation (At Vasagård)	Laboratory: cleaning, sorting, and drawing and /or photography of ceramic and lithic artifacts. Recording information: database, journal.
Day 12	Activity: Excavation (At Vasagård)	<i>Review Field Journal</i> (At Bornholm Museum)
Day 13	Visit to Hammerhus and Madsebakke/Hammerholm	Recording information: database, journal.
Day 14	Day off	Day off
Day 15	Activity: Excavation <i>Practical exam</i> (At Vasagård)	Laboratory: cleaning, sorting, and drawing and /or photography of ceramic and lithic artifacts. Recording information: database, journal.
Day 16	Activity: Excavation (At Vasagård)	Laboratory: cleaning, sorting, and drawing and /or photography of ceramic and lithic artifacts. Recording information: database, journal. <i>Lecture: Causeways camps.</i> <i>Reading from Nielsen, F. O. and Poul Otto Nielsen.</i>

		(At Bornholm Museum)
Day 17	Activity: Excavation (At Vasagård)	Laboratory: cleaning, sorting, and drawing and /or photography of ceramic and lithic artifacts. Recording information: database, journal.
Day 18	Activity: Excavation (At Vasagård)	Laboratory: cleaning, sorting, and drawing and /or photography of ceramic and lithic artifacts. Recording information: database, journal.
Day 19	Activity: Excavation (At Vasagård)	Laboratory: cleaning, sorting, and drawing and /or photography of ceramic and lithic artifacts. Recording information: Database, journal. <i>Review Field Journal</i>
Day 20	Activity: Excavation (At Vasagård)	Recording information: database, journal. (At Bornholm Museum)
Day 21	Day off	Day off
Day 22	Activity: Excavation (At Vasagård)	Laboratory: cleaning, sorting, and drawing and /or photography of ceramic and lithic artifacts. Recording information: database, journal.
Day 23	Activity: Excavation (At Vasagård)	Laboratory: cleaning, sorting, and drawing and /or photography of ceramic and lithic artifacts. Recording information: database, journal.
Day 24	Activity: Excavation (At Vasagård)	Laboratory: cleaning, sorting, and drawing and /or photography of ceramic and lithic artifacts. Recording information: database, journal. <i>Lecture: Neolithic settlements.</i> <i>Reading from Poul Otto Nielsen.</i> (At Bornholm Museum)
Day 25	Activity: Excavation (At Vasagård)	Laboratory: cleaning, sorting, and drawing and /or photography of ceramic and lithic artifacts. Recording information: database, journal.
Day 26	Activity: Excavation (At Vasagård)	Recording information: database, journal. (At Bornholm Museum)
Day 27	Activity: Excavation (At Vasagård)	<i>Presentation of the Excavation's results. Evaluation meeting & submit of the journal.</i> Dinner and farewell party.
Day 28	Departure: take students to Rønne airport or ferry for departure.	

Course structure may be subject to changes contingent upon directors' discretion.

*Evening activities in the laboratory and processing data will depend on the amount of the activities carried out daily.

** If weather conditions do not allow work at the excavation sites, it will be substituted by laboratory activities.

Regular Working Day

6:30-7:30 am	Breakfast
--------------	-----------

7:30am	Transportation to the site
8:00am – 3:00pm	Fieldwork, including a 15-minute break and a 30-minute break for lunch, and some lectures on field archaeology methods and practices (at the site)
3:00 pm-3:30 pm	Transportation to the guest house
3:30pm-5:30 pm	Dinner
5:30pm-7:30 pm (When applies)	Lectures/Workshops/ Finds processing/ Journal Night snack

LEARNING OUTCOMES

Fieldwork will focus on the excavation of the Neolithic settlements and structures of Vasagård, and as such basic excavation techniques as well as screening, sifting, and flotation will be taught in full. It will also impart the development of archaeological field documentation by maintaining a field journal on a daily basis, filling context sheets and labels, drawing an elevation plan/ground plan/cross-section, 3D positioning of finds, taking coordinates with a total station, and taking photographs at the site. Courses and seminars will help to understand the theory, the methods, and techniques applied during the fieldwork.

At the end of the fieldwork program, participants are expected to submit a report and present a practical evaluation of their experience.

GRADING MATRIX

Assessment	Date	% of Grade
Fieldwork participation, lectures, and laboratory	Throughout the course	60%
Field journal	Second and third week	20%
Exam	Beginning of 3 rd week	10%
Field report and material	Final day of course	20%

Fieldwork participation (60%): Students are required to participate in everyday activities of field school (excavation, laboratory, and lectures). This component will be assessed over the duration of the course and will reflect engagement both in the excavation and post-excavation components. Appropriate conduct, work ethic, and teamwork will be also evaluated.

Field journal (20%): Students are expected to maintain a field journal which will be submitted at the end of the field school. The field journal will be reviewed by the staff in order to assist the students in the quality of the information recorded. The field journal will be a daily journal maintained to record observations, thoughts, conclusions, and so on. It should also include observations and notes on things learned/experienced during the visits to the sites and the storerooms of the museum. It can include sketches and drawings and/or photographs. If maps were created on GIS, they will also be included. Project staff will instruct and advise students on the requirements for all these processes.

Practical exam (10%): A practical exam will take place in the beginning of the third week of the field school. Questions will address the archaeological context and materials learned through the experience gained after reading, excavating, and acquiring knowledge from the site and its materials.

Field report (20%): Reports will be due at the end of the field course and should consist of a formal academic paper. Each report should be 10 pages (approx.) in length and follow the assignment guidelines in terms of format and reference (formatting guide will be provided in the introductory course). These reports should include the full material inventories each student was responsible for (as

appendices and not part of the page count) and discussion of their results. Students will also have to input their information into the shared database and each student will be responsible for summarizing the results from one component of the analysis (ceramic, lithic, bone, and so on) in their report. Results should be discussed in relation to the archaeological and cultural context of the Neolithic period in Denmark, referring to the readings and academic literature whenever possible. Reports will be due at the end of week 4 and be submitted electronically as .doc/.docx files.

NOTES:

- Successful completion of this course requires students to a) complete all assignments and tests and b) attend and participate in all excavation and laboratory activities. Participation will involve regular recording and data entry. If students do not demonstrate adequate effort in these activities, or if there are unaddressed concerns in your handling of archaeological material, marks may be deducted from your overall score in this course. All assignments apart from the test will be submitted electronically.
- Archaeological materials should always be treated with care as they are cultural heritage. In case of human remains, respect should be presented at all times.
- Photos of the excavation and archaeological materials can only be used for the purposes outlined as part of the project. They are not for personal use and should not be posted on public forums unless such postings are pre-approved by the staff. Failure to abide by any of these points of practice could result in suspension of activities in the field school and review of further activities

TRAVEL & MEETING POINT

The guest house is in the city of Rønne, capital of the island of Bornholm. The island of Bornholm is located to the northeast of Denmark. Students are expected to arrive at the Bornholm Airport (RNN) or marine port in the city of Rønne on or before June 17, 2018. It takes approximately three hours for passengers and freight to travel between Copenhagen and Rønne via Ystad in Sweden. There are also frequent flights between Bornholm Airport and Copenhagen Airport (25 minutes flight). It is important to check the low-cost flight options. Students will be met at the airport or the ferry dock by the project's staff and taken to the field house.

If you missed your connection or your flight is delayed, please call, text or email the project director immediately. A local emergency cell phone number will be provided to all enrolled students.

VISA REQUIREMENTS

All students are required to have a valid passport when traveling to Denmark. US citizens must have valid passport for at least six months beyond the last day of the field school. Citizens of other countries must consult the Danish embassy website at their home country for specific visa requirements.

Where necessary, the BARC can send an official invitation letter that should be used at the relevant Danish Consulate to secure a visa to the program.

ACCOMMODATIONS

The field house is in the city of Rønne, capital of the island of Bornholm. It has been adapted into a comfortable bungalow with beds (bathrooms with shower, WC, and heating system), which also provides free Wi-Fi. Participants are expected to bring sleeping bags and personal towels. Rooms will be shared.

Food is not included in the tuition for this program. The house, however, is properly furnished with all the cooking appliances and refrigerators so students can share the tasks of doing the shopping and

cooking their own meals on their own. In the city, there are several options of places where food can be bought for affordable prices (approx. 15 to 20 \$US). Food stores are within a walking distance from the guest house.

EQUIPMENT LIST

Participants will use the tools and equipment provided by the project and available at the site. The following items are required:

- Good walking/work boots
- Sunscreen and hat*
- Raincoat/rain gear*
- Any required medication for the duration of the field school (controlled medication should have a medical prescription) *.
- Passport*

Recommended Equipment

- Water bottle
- International Student card (this is optional but may result with discounts in museums and other venues in Denmark)
- Archaeological-standard trowel (Marshalltown Pointing Trowel—5” by 2” or WHS trowel)
- Leaf trowel for finer work
- Wooden skewers
- Plumb bob
- Paintbrushes in a range of sizes for excavation and cleaning purposes
- A set of digital calipers (preferably carbon fiber to avoid damage to bone)
- Notebook, pencils, pens, and an eraser.
- Laptop or workable tablet

MANDATORY READINGS

British Archaeological Job Resources. 2004. *Short Guide to GPS*. BAJR Practical Guide Series. Read Pp. 2-12.

Davies, Dafydd. 2002. *Stratification Theory*. BAJR Series, Guide 40. Read Pp. 1-94.

Joukowsky, Marta and Graydon Wood. 1980. *Complete Manual of Field Archaeology: Tools and Techniques of Fieldwork for Archaeologists*. A Spectrum Book. Read Pp. 132-149.

Madsen, T. 1988. Causewayed enclosures in South Scandinavia. In C. Burgess *et al.* (eds.): *Enclosures and Defenses in the Neolithic of Western Europe*. BAR International Series 403, pp. 301-336.

Nielsen, Poul Otto. 2012. Causewayed camps, palisade enclosures and central settlements of the Middle Neolithic in Denmark. *Journal of Nordic Archaeological Science* 14, pp. 19-33.

Nielsen, F.O. and P. O. Nielsen. 1991. The Middle Neolithic Settlement at Grødbygård, Bornholm. In K. Jennbert *et al.* (eds.): *Regions and Reflections in Honor of Märta Strömberg*. Acta Archaeologica Lundensia Series in 8, N.20, pp. 51-65. Lund.

Renfrew, Colin and Paul Bahn. 2000. *Archaeology: Theories, Methods and Practice*. Thames and Hudson, UK (Third Edition). Read Pp. 49-170.

World Heritage Organization. 2016. *Archaeological Excavation*.

http://www.worldheritage.org/articles/Archaeological_excavation. Pp. 1-49.

RECOMMENDED READINGS

Anders, N. H. 1982. A Neolithic causeway camp at Trelleborg near Slagelse, West Zealand. *Journal of Danish Archaeology* 1, Pp. 31-33.

Anders, N. H. 1997 The Sarup Enclosures. *Jutland Archaeological Society Publications* 33:1. Århus.

Jensen, Jørgen. 2013. *The Prehistory of Denmark from the Stone Age to the Vikings*. Gyldendal. København. Parts I and II (Pp. 67-117).

Hvass, Steen and Birger Storgaard (eds.). 1993 *Digging into the past. 25 years of Archaeology in Denmark*. The Royal Society of Northern Antiquaries and The Jutland Archaeological Society. Chapters 1, 2 and 3 (Pp. 16-126).