

ARCTIC VIKINGS FIELD SCHOOL: SITE NKAH-5500, VATNAHVERFI REGION, SOUTH GREENLAND

Course ID: ARCH 365Y

June 30– July 31, 2018

FIELD SCHOOL DIRECTORS:

Dr. Hans H. Harmsen, Archaeologist/Curator, Greenland National Museum and Archives, Research Assistant Professor, SUNY at Buffalo (harmsen@natmus.gl)

Dr. Christian Koch Madsen, Archaeologist/Curator, Greenland National Museum and Archives, Post Doc, National Museum of Denmark (christian@natmus.gl)

Michael Nielsen, Archaeologist/Collections Manager, Greenland National Museum and Archives (michael@natmus.gl)



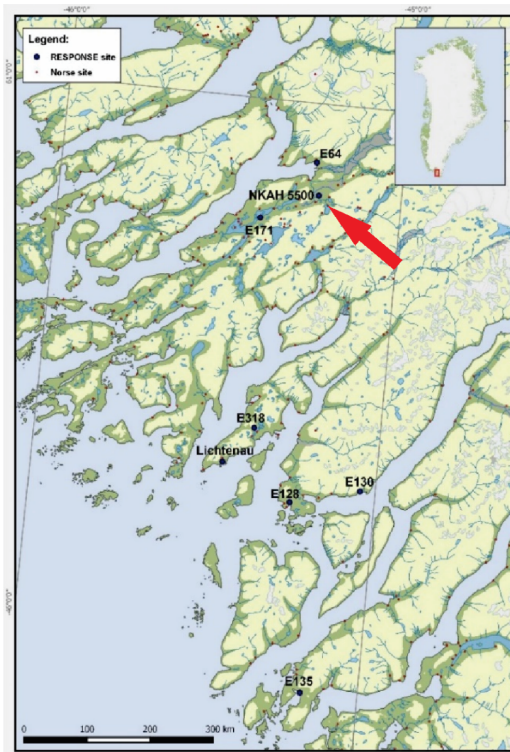
Horses and sheep grazing in a highland meadow near Tasiusaq. In the background the ice-filled Tasiusaq Fjord. © Niels Christian Clemmensen / Christian K. Madsen.

INTRODUCTION

Greenland is undergoing an rapid environmental change as global warming continues to disproportionately impact in the circumpolar North . For archaeologists, this means the rapid and complete loss of organic artifacts and ecofacts. This “melting midden” phenomenon is caused by rising soil temperatures and poses an immediate threat to inland sites in Greenland. The portion of SW Greenland that holds the Norse Eastern Settlement (>500 sites) and a substantial number of prehistoric and colonial era early modern sites is now over the critical threshold, and hundreds of these sites are now rapidly degrading. We face an urgent threat because these unique scientific and cultural resources may soon be gone forever.

The main site we will be investigating is NKAH-5500, a newly discovered Norse farm in the Vatnahverfi region of the UNESCO property. Heavy *foehn*-wind erosion in the area has partially exposed several buildings and a possible midden deposit evidenced by a large clustering of bones and artifacts found scattered on the surface of the site. The area is extremely vulnerable to wind erosion and organic preservation is believed to be compromised. This site was initially assessed and surface mapped (GPS) between 2015 and 2016, but more extensive and detailed coring and subsurface testing is necessary to locate the core midden area and confirm the state of preservation.

This field school is a four-week experiential learning program for students to gain a fundamental understanding of basic methods of archaeological field research in the Arctic. This includes standardized techniques of site identification, landscape survey, field recording, testing, and excavation. Students will also learn to identify common artifact types and sample processing procedures. Supplementary evening lectures and daily discussions will expand these skills and introduce additional topics, including archaeological research design, community archaeology, global change



Location of site NKAH-5500.

effects on cultural heritage, legal and ethical aspects of archaeological excavation and various specializations in the field. Students will spend the majority of the field school at NKAH 5500, but students will also have the opportunity to participate in archaeological surveys of the surrounding fjord. Participation in field transport and logistics as well as general camp tasks during the field season will provide students a basic grounding in the fundamentals required for successful Arctic archaeology. Students will not only learn about archaeological field methods but will have experience with community archaeology and will have insight into emerging issues of global change effects on cultural resources. Due to the urgency of the situation, emphasis will be placed on rapid and efficient techniques in the field. This field school is [RPA certified](#) (Register of Professional Archaeologists) and will benefit students who plan to pursue cultural resource management work in the future.

COURSE OBJECTIVES

After completing this course, students will be able to:

- Identify and record an archaeological site.
- Demonstrate competence in basic procedures of excavation and documentation including:
 - Lay out an excavation unit
 - Use standard tools and techniques to excavate the unit to professional standards.
 - Fill out paper documentation
 - Complete plan maps and profiles (using both traditional and electronic methods of provenience control)
 - Photograph the excavation unit
- Indicate a basic understanding of archaeological method and theory
- Demonstrate competence in basic field laboratory processing techniques

- Demonstrate an understanding of basic problems in Arctic archaeology, including chronology, stratigraphy, taphonomy, site formation processes, and factors that affect sites, including the effects of modern human and global climate challenges
- Understand archaeological research designs and how they impact field investigations
- Demonstrate an understanding of how to evaluate archaeological finds
- Demonstrate an understanding of archaeological ethics
- Demonstrate an understanding of community engagement and meaningful collaboration as it relates to archaeological practice

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. This is hands-on, experiential learning and students will study on-site how to conduct archaeological research. Archaeology involves physical work and exposure to the elements and thus, requires a measure of acceptance that this will not be the typical university learning environment. You will get sweaty, cold, tired and have to work and live outdoors. Students are required to come equipped with sufficient excitement and adequate understanding that archaeological fieldwork requires hard work.

DISCLAIMER – PLEASE READ CAREFULLY

Archaeological field work involves physical work in the outdoors. You should be aware that conditions in the field are different than those you experience in your home, dorms or college town. This program operates at a typical inland fjord valley in Southern Greenland. During the day, temperatures under the shadow fluctuate between 30°-70°F depending on the weather. Heavy rains, winds and sometimes even snow can occur during the summer months in Greenland. Because of its northern latitude you will also be exposed to high UV index so appropriate measures should be taken for those with fair skin or sun sensitivities. Mosquitoes and black flies can also be problematic depending on the temperature.

If you have any medical concerns, please consult with your doctor. For all other concerns, please consult with the project directors – as appropriate.

TEAMS AND COURSE MODULES

Students participating in the Arctic Viking Field School will be engaged in a variety of different learning experiences that range from direct hands-on training in the field and laboratory to specially themed lectures during the course of the program. The general curriculum is divided between digital landscape

survey, keyhole investigations and laboratory/post-excavation artifact processing. These general activities are supplemented by lectures, special workshops, community days and excursions interspersed throughout the course of the field school. Since archaeological fieldwork often requires an effective distribution of labor, students will be asked to participate in different activities at different times. At the end of the field school students will be competent in the fundamental principles of archaeological survey, test excavation and post-fieldwork artifact processing.

GRADING MATRIX

This course uses a letter grading system (A, B, C, D, and F). A=90-100%, B=80-90%, C=70-80%, D=60-70%, F=0-60%. Your understanding of archaeological field methods and your ability to transform this to practice will be evaluated using this combination of these factors:

- **40%: Required documentation and journal log.** Your grade for documentation assignments will be determined based on the completeness, accuracy, and legibility of the submitted forms and field books, as well as the proper execution of documentation photographs (use of scales, properly logged, cleaned for photography). *Maintaining proper documentation is extremely important!* This is because archeological excavation is destructive and anything not properly and accurately documented is lost forever. In addition, all students will be required to keep a daily journal on loose leaf paper or notebook that will record details about the day's events, what was completed, concepts learned, new definitions and terms, information about the deposits or features that they are excavating, on-going thoughts about interpretations, etc. Students are encouraged to include drawings, sketches or site maps as part of their journal. Progress will be checked periodically during the course and a copy of the journal must be provided to the director of the field school before you leave to satisfy the written requirement of the course.
- **25%: Discussion & camp participation/attitude.** It is important for students to take part in all aspects of this excavation to achieve the desired learning outcomes. This includes not only the work performed while in the field but helping to make sure the operations of the camp are orderly. Assigned readings should be finished before planned discussions and lectures. Completing reading early will be beneficial, since there will be professional archaeologists and advanced students participating in the excavations and topics may well come up before the assigned date. **Crew members with positive attitudes are very important for a productive excavation in the challenging field conditions of the Arctic!** We all share the responsibility to keep the experience positive for other students, instructors, local community members and visiting scholars.
- **25%: Performance in field and laboratory activities.** Your grade for field and laboratory performance is based on the ability to demonstrate applied knowledge of the basics of various field techniques. In some cases, individuals may have particular aptitude for a particular task and may spend extra time on that task, learning to perform it particularly well. However, since this is a field school, and many smaller projects will need crewmembers to be able to perform all tasks, you will be expected to demonstrate a **basic competence** in all areas that are covered in this course.
- **10%: Oral examination.** Each student will be expected to perform in a 15-20 minute oral examination prior to leaving Greenland. The exam will draw on the readings, lectures and personal experiences while in the field in addition to how this knowledge might be applied to your future career path and interests.

TRAVEL AND MEETING POINT

All students are responsible for arranging their own transportation to Narsarsuaq, Greenland and arrive on Saturday, June 30. Upon arrival in Narsarsuaq, students will be met by members of the project team

outside the baggage terminal. Students should ensure that they have sent their time of arrival to Drs. Harmsen and Madsen in advance.

This program concludes on Monday, July 30 when we arrive back at Narsarsuaq. Students may depart for their return home, or onward travel, anytime on Tuesday, July 31.

Travel from North America (USA & Canada)	Connecting flight and pass through passport control in Keflavik International Airport (KEF)	Bus/taxi from KEF to Reykjavík Airport (RKV) near city center. Take Air Iceland flight to Narsarsuaq (UAK)
Travel from EU	Connecting flight through Copenhagen Airport (CPH)	Travel to Kangerlussuaq (SFJ) and take connecting flight to Narsarsuaq (UAK)

If you miss your connection or your flight is delayed, please call, text, or e-mail the project directors immediately. A local emergency cell phone number will be provided to all enrolled students.

VISA REQUIREMENTS

A valid passport and evidence of return or onward travel are required to enter and depart Greenland. All travelers entering Greenland should have a passport that is valid for at least 90 days after they depart their country of residence. The ideal amount of validity time that should be left on your passport when you depart a country should be roughly 6 months. Students travelling through Iceland will pass through Icelandic immigration prior to arrival in Greenland and may be asked to provide proof of their participation in the field school. We will provide this letter of participation to all students prior to departure.

ACCOMMODATIONS

On site—where the majority of the field school will take place—we will be camping. You should bring your own tent, sleeping bag, air mattress etc. of good quality that are suitable for high winds and night temperatures that may drop to below freezing. You will receive an information before we leave detailing the equipment for which you will be responsible. Water will be collected from local springs for cooking and drinking. This is a rugged and isolated environment with absolutely no supermarkets or stores in the immediate area. Toilet facilities are basic but functional. Our toilets are frequently renewed, open-air (with privacy screens). Arrangements will be made with a nearby farmer to access shower facilities during the weekends.

MEALS

All food during the course of the field school is inclusive. All meals will be communal events and provide nutritious but basic food with what can be obtained in the nearby towns. We take turns cooking and doing the washing up, allowing budding chefs an opportunity to wow us all. It is not possible to accommodate special dietary needs in this remote location. This is due to the lack of ingredients that can be purchased in the immediate area.

STUDENTS WITH DISABILITIES AND SPECIAL NEEDS

The Greenland National Museum and Archives and IFR is committed to equal opportunity for students experiencing disabilities. However, due to the physical nature of archaeological fieldwork and the remote location of the field camp, students with disabilities and special needs are encouraged to contact the instructor prior to enrollment in the course to determine whether safe and suitable arrangements may be made to ensure a positive educational experience.

WHAT TO BRING

Excavation equipment and major camp equipment (mess and lab tents, kitchen gear, etc.) is provided. You will need basic personal camping and field gear (a cold-weather tent and sleeping bag, sleeping pad, rain gear, warm and waterproof clothes) although we may be able to help if you do not have a tent. A detailed list of what to bring will be provided by the director(s).

COURSE SCHEDULE

Course Schedule

Week	Date	Activity
Week 1	30 June - 2 July	<p>30 June: Arrival in Narsarsuaq and welcome dinner. Overnight stay at Narsarsuaq Hotel.</p> <p>1 July: Group orientation and safety review. After lunch, quick visit across the bay to Eric the Red's Farm (Brattahlið) at nearby Qassiarsuk. Overnight at Narsarsuaq Hotel.</p> <p>Morning of 2 July. Transport to NKAH-5500 Afternoon arrival. Camp set up. After dinner, evening lecture (#1): <i>Introduction to Arctic Archaeology</i></p>
Week 1	3 July – 6 July	<p>Site mapping with dGPS and drone, prepare the site for excavation and begin preliminary excavations.</p> <p>4 July evening lecture (#2): <i>Why do we dig?</i></p>
Week 1	7 July	<p>Morning hours, regular work schedule Afternoon & evening – personal time, catch up on readings, paperwork, wash clothes etc.</p> <p>Evening activity TBD</p>
Week 2	8 July – 13 July	<p>Keyhole excavations at NKAH-5500</p> <p>8 July evening lecture (#3): <i>A short cultural history of Greenland</i></p> <p>10 July evening lecture (#4): <i>Arctic horizons</i></p> <p>12 July evening lecture (#5): <i>What every traveler to Greenland should know</i></p>
Week 2	14 July	<p>Group trip to Qaqortoq; sightseeing and stock up on fresh food.</p>
Week 3	15 July	<p>Morning hours, regular work schedule Midcourse evaluations on progress of the field school Afternoon & evening – personal time, catch up on readings, paperwork, wash clothes etc.</p>

		Evening activity TBD
Week 3	16 July – 20 July	Survey of surrounding fjord, small teams
Week 3	16 July – 20 July	16 July evening lecture (#6): <i>Zooarch 101 (guest lecturer Konrad Smiarowski)</i> 18 July evening lecture (#7): <i>Greenland and UNESCO World Heritage</i> 20 July evening lecture (#8) <i>Melting middens?</i>
Week 3	21 July	Group excursion to Sissarluttoq and Igaliku (Garðar)
Week 4	22 July	Morning hours, regular work schedule Afternoon & evening – personal time, catch up on readings, paperwork, wash clothes etc. Evening activity TBD
Week 4	23 July – 27 July	Winding down field work, flexible working groups, individuals may be given various tasks as needed during the closing of the test trenches at NKAH-5500. Artifact sorting, cleaning, storage. 24 July evening lecture (#9): <i>Norse “collapse”</i> 26 July evening lecture (#10): <i>What is worth saving?</i> 28 July evening lecture (#11): <i>CRM in the 21st century</i>
Week 4	28 July	Morning hours, regular work schedule Afternoon & evening – personal time, catch up on readings, paperwork, wash clothes etc. Evening activity TBD
Week 5	29 July	9 – 12 time provided for individual oral exams . After lunch, final packing and site clean-up 29 July evening lecture (#12) followed by farewell party
Week 5	30 July	Depart for Narsarsuaq airport. We suggest students plan for a late evening flight on Monday or to depart anytime during the day on Tuesday, 31 July. Students remaining in Narsarsuaq overnight will have accommodations provided at the Narsarsuaq Hotel.

REQUIRED READINGS

- Arneborg, Jette, Niels Lynnerup, and Jan Heinemeier (2012)
Human diet and subsistence patterns in Norse Greenland AD C. 980—AD c. 1450: archaeological interpretations. *Journal of the North Atlantic* 3:119-133.
- Berglund, Joel (1986)
The decline of the Norse settlements in Greenland. *Arctic Anthropology* 23(1/2):109-135.
- Bishop, Rosie R., et al. (2013)
A charcoal-rich horizon at Ø69, Greenland: evidence for vegetation burning during the Norse landnám? *Journal of Archaeological Science* 40(11):3890-3902.
- Diamond, Jared (2005)
Collapse: How societies choose to fail or succeed: Penguin. Chps. 6,7 & 8 (pp. 178-276)
- Dugmore, A.J., et al. (2012)
Cultural adaptation, compounding vulnerabilities and conjunctures in Norse Greenland. *PNAS* 109(10):3658-3663.
- Dugmore, Andrew J., Christian Keller, and Thomas H. McGovern (2007)
Norse Greenland settlement: reflections on climate change, trade, and the contrasting fates of human settlements in the North Atlantic islands. *Arctic anthropology* 44(1):12-36.
- Frei, Karin M., et al. (2015)
Was it for walrus? Viking Age settlement and medieval walrus ivory trade in Iceland and Greenland. *World Archaeology* 47(3):439-466.
- Grant et al. (2008)
Chp. 10, Managing the past. *The Archaeology Coursebook: An introduction to themes, sites, methods & skills*. Routledge, pp. 341-376.
- McGovern, Thomas H., et al. (2017)
Zooarchaeology of the Scandinavian settlements in Iceland and Greenland: diverging pathways. In *The Oxford Handbook of Zooarchaeology*. U. Albarella, H. Russ, K. Vickers, and S. Viner-Daniels, eds. Pp. 147-163. Oxford: Oxford University Press.
- Nuttall, Mark (2010)
Anticipation, climate change, and movement in Greenland. *Études/Inuit/Studies* 34(1):21-37.
- Stendel, Martin, Jens Hesselbjerg Christensen, and Dorthe Petersen (2008)
Arctic climate and climate change with a focus on Greenland. *Advances in Ecological Research* 40:13-43.

RECOMMENDED READINGS

Cross, Susan, Charles Hett, and Margaret Bertulli (1991)

Conservation manual for northern archaeologists= Manuel de conservation destiné aux archéologues du Nord: Prince of Wales Northern Heritage Centre= Centre du patrimoine septentrional Prince de Galles. 40 pp.

Vésteinsson, Orri (2016)

Kujataa – a subarctic farming landscape in Greenland. Nomination to UNESCO's World Heritage List. 264 pp.