ANTH 248: The Archaeology of Wild Foods

Professor Madonna L. Moss
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WHERE AND WHEN
Lecture: 12 noon – 1:20 pm, Monday & Wednesday in 240C McKenzie; Lab Sections on Thursdays.

Most Lab Sections in 204 Condon, but during Weeks 6, 7, 8, labs are at the Many Nations Longhouse.

Course Materials: All readings are available through the Canvas course website. Assigned handouts, websites, and videos are in a separate Canvas module.

Required Resources: I-Clicker 2, please register in Canvas.

COURSE DESCRIPTION
Obviously, food is necessary for human survival, but it is also a vital form of material culture. Archaeological evidence of the foods eaten in the ancient past can reveal aspects of identity, community, and interaction. In this course, we explore some of the earliest evidence of food, how it is interpreted archaeologically, and what this tells us about people's lives. We focus on four topics:
1) how diet and the earliest cooking technologies affected human evolution
2) the harvest and processing of several key wild foods of the Pacific Northwest
3) cooking technologies that pre-date the advent of pottery and metal
4) how food is central to the identities and cultures of Native Americans, First Nations, & Alaska Natives

In this course, students will learn about the origins of cooking over 1 million years ago, various “Paleodiets,” how First Nations, Native Americans, and Alaska Natives developed ingenious ways to support themselves, and how people boiled in baskets and boxes, cooked in underground ovens, dried and smoked fish, and made bone grease and fish oils. Along the way, we learn about the myriad ways archaeologists and anthropologists study food remains and traces of consumption and processing.

Students will develop foundational knowledge in aspects of 1) nutrition and diet, 2) food processing and safety, and the 3) ecology, zooarchaeology, and paleoethnobotany of the Pacific Northwest. Laboratory exercises allow students to examine stone and bone tools and how archaeologists study food remains. They will gain perspective on their own dietary habits, participate in pre-industrial food preparation and cooking exercises, and take part in a tasting event at the Many Nations Longhouse. Upon completion of the course, students will understand how food is embedded in the Indigenous cultures of the Pacific Northwest, and re-evaluate their own personal connections to food, including wild foods.

As a Science (SC) Group-Satisfying Course, this class introduces students to archaeology, human evolution, zooarchaeology, paleoanthropology, nutrition, ecology of the Pacific Northwest, and fisheries and wildlife management. We consider basic questions such as how meat-eating (through scavenging then hunting) affected our evolutionary trajectory and how cooking made available nutrients that sustained the development and expansion of the hominid brain. We examine these fundamental questions by investigating the archaeological and paleontological records. From bone chemistry and tooth microwear, we know that Homo was an omnivore, and we examine the early evidence for
controlled use of fire to cook food. Of the traditional cooking techniques we survey, the use of earth ovens goes back 30,000 years, and these made possible the consumption of plants that were previously inedible or hard to digest. How cooking alters the chemistry of foods by destroying food-poisoning bacteria or increasing the available nutrients (e.g., from inulin) will be described. The Maillard reaction and preservation techniques (smoking, fermentation) will be reviewed. Students will become acquainted with contemporary fish and wildlife management, with attention to historical ecology, commercial fishing for salmon, herring, and invertebrates, and sports vs. subsistence hunting of birds. They will learn about loss of camas habitat in the Willamette Valley over the last 150 years. They will witness how archaeologists integrate data from many disciplines (fisheries and wildlife biology, ecology, oceanography, molecular analyses) to investigate issues of anthropological importance.

As a U.S. Difference, Inequality, and Agency offering, this course examines wild foods relied upon by Alaska Natives (Tlingit, Haida), First Nations of British Columbia (Haida, Heiltsuk, Kwakwak’wakw, Nuu-chah-nulth, Coast Salish), and Native Americans in Washington and Oregon (Makah, Coast Salish, Kalapuya), with a foray into food traditions of the Wampanoag and the Pilgrims at the mythical “First Thanksgiving.” In our exploration of traditional cooking techniques we draw on examples from the Indigenous peoples of the Far North & Subarctic (Yupik, Inupiat, Inuit, Cree), Plateau, and American Southwest. The course reveals the antiquity of use of animal and plant foods as evident in the archaeological record, the impact of colonialism on indigenous resources and foodways, and the maintenance and practice of aboriginal food traditions today in the context of commercial fishing and shell-fishing, pollution, and climate change. We will learn how dispossession from Indigenous lands and federal, provincial and state control of fish and wildlife (in the U.S. and Canada) has created a legacy of inequality Indigenous people continue to resist today. Students will have the opportunity to reflect on their own families and food traditions and understand how their multiple social identifications have formed in relation to power. We address several controversial issues, such as the Makah Tribe’s treaty right to hunt whales and the hunting of a variety of marine mammals by Alaska Natives. We examine the history of “subsistence management” in Alaska and Indigenous food sovereignty movements that work to re-instate the centrality of indigenous foods in modern diets. By understanding the archaeological and historical context of these issues, students will gain an expanded view of their own food choices and traditions. Over the term, students will gain insight into the intersecting aspects of identity particularly salient to Indigenous peoples of the Northwest and Far North, particularly race, gender, socioeconomic status, indigeneity, national origin, and urban/rural. How institutional power has been and continues to be used to marginalize Indigenous peoples is explored with many examples. Four of the authors we read are of Indigenous descent, and tribal members take part in the Tastings lab at the Many Nations Longhouse. One-third of our laboratories take place in the Longhouse. The course provides students with a critical perspective on contemporary environmental issues that affect everyone living in the Pacific Northwest.

Overarching Learning Outcomes: More than 100 learning outcomes have been developed for this course. These are posted in a separate module on Canvas. They can all be nested within at least one of the following overarching learning outcomes.

- learn how to read scientific literature and develop scientific literacy drawing from multiple disciplines (archaeology, biological anthropology, nutritional ecology, historical ecology, marine ecology, fisheries and wildlife management) to critically evaluate research on course topics
- learn how archaeologists study foodways, by employing traditional ecological knowledge, ethnographies, history, experimental and actualistic studies to interpret standard
archaeological, zooarchaeological, and paleobotanical data (from survey, excavation, and analyses of archaeological site contents and structure)

- understand the legacies of evolution regarding scavenging, meat-eating, and cooking of wild plant and animal foods and how these have affected the biology and development of our species over time
- demonstrate specific knowledge of the Indigenous foodways of different tribal groups in the Pacific Northwest and Far North that involved a variety of wild foods (including salmon, herring, shellfish, marine mammals, camas and other plants). Understand how colonial systems undermined Indigenous foodways and ecological knowledge and reverberate today.
- gain academic and experiential knowledge of 1) chipped stone tool use, 2) identifying animal bones and taphonomic signatures, 3) use of screens in data recovery, and 4) stone-boiling, pit-roasting, extracting bone marrow, and making bone grease using some pre-industrial tools and techniques.
- experience the inter-connections of food, identity, and culture in Alaska Native, First Nations, and Native American societies. Understand how Indigenous food sovereignty movements emphasize the cultural responsibilities and relationships Indigenous peoples have with their environments. Reflect upon how food, identity, and culture are intertwined in everyone’s lives.

**Estimated Student Workload:** Students are expected to attend all lectures and a lab each week. Students should spend on average **8 hours per week outside of class** completing readings and reviewing course materials, with more time spent studying during the weeks leading to the three exams. Three pre-lab and two pre-lecture assignments will be completed. The assignments are submitted online BEFORE class (11:30am) or the first lab (9am), and students should bring a hard copy to lecture or lab.

**Grading:** Final grades will be based on a percentage of 285 points:

- two exams (multiple choice) during class (each 40 points)
- one final exam (60 points)
- laboratory attendance and participation (each 5 points); arrive on time and stay for the full period. Some labs are exercises or demonstrations; others are group discussions
- 2 pre-lecture assignments (each 10 points); submit online prior to lecture at 11:30 am
- 3 pre-lab assignments (each 10 points) submit online prior to 9:00 am
- participation (50 points) via I-Clicker use and 1-minute papers (submit on index cards)

Grades are rounded to the nearest tenth, and the grading scale is as follows:

- A+ = 97.5-100%
- B+ = 87.5-89.9%
- C+ = 77.5-79.9%
- D+ = 67.5-69.9%
- A = 92.5-97.4%
- B = 82.5-87.4%
- C = 72.5-77.4%
- D = 62.5-67.4%
- A- = 90-92.4%
- B- = 80-82.4%
- C- = 70-72.4%
- D- = 60-62.4%
- F = 59.9% or below

If the class is taken P/NP, a C- or higher is required to pass the course.

**Expected levels of performance:**
A+ Quality of student's performance significantly exceeds all requirements and expectations required for an A grade. Very few, if any, students receive this grade.

A: Quality of performance is outstanding relative to that required to meet course requirements; demonstrates mastery of course content at the highest level.
B: Quality of performance is significantly above that required to meet course requirements; demonstrates mastery of course content at a high level.

C: Quality of performance meets the course requirements in every respect; demonstrates adequate understanding of course content.

D: Quality of performance is at the minimal level necessary to pass the course, but does not fully meet the course requirements; demonstrates a marginal understanding of course content.

F: Quality of performance in the course is unacceptable and does not meet the course requirements; demonstrates an inadequate understanding of course content.

**Course Readings** (listed alphabetically here, see class schedule for when to read)


Course Policies

Inclusion Statement
The College of Arts and Sciences at the University of Oregon affirms and actively promotes the right of all individuals to equal opportunity in education without regard to race, color, sex, national origin, age, religion, marital status, disability, veteran status, sexual orientation, gender identity, gender expression or any other consideration not directly and substantively related to effective performance. If a student feels that s/he has encountered discrimination or harassment, please inquire at the Office of Affirmative Action & Equal Opportunity (http://aaeo.uoregon.edu, 541-345-3123) for information on a student’s rights, options, and resources. Confidentiality for all parties is respected to the extent possible.
Disability If a student has a documented disability and will need accommodation in this course, please contact the instructor soon. Please also request the Counselor for Students with Disabilities send a letter verifying the disability.

Academic Dishonesty Students caught cheating or plagiarizing will receive a "0" for that particular assignment or exam, and the incident will be reported to campus authorities. Plagiarism includes, but is not limited to: (a) the knowing or negligent use by paraphrase or direct quotation of the published or unpublished work of another person without full and clear acknowledgment; and (b) the knowing or negligent unacknowledged use of materials prepared by another person or agency engaged in the selling of term papers, other assignments, or other academic materials. For more information about academic misconduct, see http://dos.uoregon.edu/social-misconduct. For more information on avoiding plagiarism, see http://researchguides.uoregon.edu/citing-plagiarism.

Classroom/Office Courtesy - Please follow these guidelines to avoid disrupting class:
- Turn off cell phones before arriving.
- Do not arrive late or leave early (except for a bathroom break or emergency).
- Do not sleep during class.
- Do not work on other assignments during class.
- You can use computers or tablets to take notes, but do not tweet, surf the web, shop, check email or Facebook, Instagram, etc., during class.

Missed-Class Policy – I cannot re-teach the course outside of lecture; I am happy to answer questions, clarify content, and provide guidance for those who attend class and come in with informed questions after they have attempted the work themselves. Students who miss class must secure notes and other materials from another student in the class.

Material on the CANVAS site is for student use in this class. It is not for posting or sale. Materials written by the instructor are the instructor’s intellectual property. It is important that everyone respect each other’s rights. For instance, a student should not copy and redistribute course materials without instructor’s permission. The instructor may post copyrighted materials on the course site. It is the instructor’s responsibility for ensuring that such posting does not violate copyright law, but students should be aware that they do not have the right to make additional copies or redistribute these materials.
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<td>Food 50 Years Ago</td>
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<td>Dietary change over 500 years: Columbian Exchange; sweet potato as even older evidence of food globalization</td>
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<td>How students’ diets compare to those of grandparents</td>
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<td>Our Omnivorous Ancestors I</td>
<td>Pobiner 2016; Archer et al. 2014</td>
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<td>Today’s “Paleo-Diet”: Is it really “Paleo”?</td>
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<td><strong>Exam 1 in Class</strong></td>
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<td>Chipped Stone, Screen Recovery, Bone Taphonomy</td>
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<td>Introduction to Northwest Peoples &amp; History; Salmon</td>
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<td>10/31</td>
<td>Review of Exam 1 &amp; Geography for Unit 2</td>
<td>Moss 1993; Brown &amp; Brown (2009:VIII, 36, 43); view Ancient Sea Gardens</td>
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<td>Shellfish and Clam Terraces</td>
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<td>Salmon, Baked Camas, Bone Marrow Tasting</td>
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<td>11/11</td>
<td>Camas, Acorns, and other plants</td>
<td>Suttles 2005; Moss 2017 blog</td>
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<td>Hot Rock Cookery – Pit Ovens</td>
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<td>Preparing Salmon and how to use ethnographic sources</td>
<td>Boas 1921; Pre-lecture worksheet</td>
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<td>Stone Boiling, FCR &amp; TMR, boiling in a box or hide</td>
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<td>Foods at the First Thanksgiving - Excerpt from <em>The Pilgrims</em></td>
<td>Deetz &amp; Deetz 2000; Dow 2003</td>
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<td>No Lab - Thanksgiving</td>
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<td>12/5</td>
<td>Indigenous foods of the North</td>
<td>Pre-lab powerpoint; Kuhnlein &amp; Humphries 2017; Kuhnlein &amp; Turner 2009</td>
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<td>12/10</td>
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**Part III: Pre-Neolithic Cooking Technologies**

**Part IV: Native Americans, Alaska Natives and First Nations: Food, Identity and Culture**