Archaeology of the American South
Anthropology 550
Spring 2024

Week 7: Eastern Agricultural Complex

Eastern North America is one of the very few places in the world where farming was independently invented, and our understanding of that process has progressed greatly over the last 30 years. These readings explore the evidence that underlies this understanding, as well as some recent interpretations of how the process took place. The general readings should be read by everyone, while the supplemental readings will be assigned to subsets of the class. In reading the opening article, be sure to focus on the model they propose for how the initial domestication of the Eastern Agricultural Complex took place.

General readings:

Smith, Bruce D., and C. Wesley Cowan (2003). Domesticated Crop Plants and the Evolution of Food Production Economies in Eastern North America. In *People and Plants in Ancient Eastern North America*, edited by P. Minnis, pp. 105-125. Smithsonian Institution Press.

Smith, Bruce D. (2006). Eastern North America as an Independent Center of Plant Domestication. *Proceedings of the National Academy of Sciences* 103(33): 12223–12228.

Mueller, Natalie G., et al. (2017). Growing the Lost Crops of Eastern North America's Original Agricultural System. *Nature Plants* 3 (art. 17092): 1-5.

Fritz, Gayle J. (1999). Gender and the Early Cultivation of Gourds in Eastern North America. *American Antiquity* 64(3): 417-429.

Scarry, C. Margaret (2008). Crop Husbandry Practices in North America's Eastern Woodlands. In *Case Studies in Environmental Archaeology*, edited by Elizabeth J. Reitz, C. Margaret Scarry, and Sylvia J. Scudder, pp. 391-404. 2nd edition. Springer, New York.

Supplemental readings:

Smith, Bruce D. (1992). The Economic Potential of *Chenopodium berlandieri* in Prehistoric Eastern North America. In *Rivers of Change: Essays on Early Agriculture in Eastern North America*, by Bruce D,. Smith, pp. 163-183 [chapter 7]. Smithsonian Institution Press. [Also read pp. 116-128 in Smith 1985.]

Smith, Bruce D. (1992). The Economic Potential of *Iva Annua* in Prehistoric Eastern North America. In *Rivers of Change: Essays on Early Agriculture in Eastern North America*, by Bruce D,. Smith, pp. 185-200 [chapter 8]. Smithsonian Institution Press.

Cowan, C. Wesley (1997). Evolutionary Changes Associated with the Domestication of *Cucurbita Pepo*: Evidence from Eastern Kentucky. In *People, Plants, and Landscapes: Studies in Paleoethnobotany*, edited by Kristen J. Gremillion, pp. 63-85. University of Alabama Press, Tuscaloosa.

Cowan, C. Wesley (1978). The Prehistoric Use and Distribution of Maygrass in Eastern North America: Cultural and Phytogeographical Implications. In *The Nature and Status of Ethnobotany*, edited by Richard I. Ford, pp. 263-288. Anthropological Papers 67. Museum of Anthropology, University of Michigan, Ann Arbor.

Optional readings:

Asch, Nancy B., and David L. Asch (1978). The Economic Potential of Iva Annua and its Prehistoric Importance in the Lower Illinois Valley. In *The Nature and Status of Ethnobotany*, edited by Richard I. Ford, pp. 300-341. Anthropological Papers 67. Museum of Anthropology, University of Michigan, Ann Arbor.

Chomko, Stephen A., and Gary W. Crawford (1978). Plant Husbandry in Prehistoric Eastern North America: New Evidence for Its Development. *American Antiquity* 43(3): 405-408.

Yarnell, Richard A. (1978). Domestication of Sunflower and Sumpweed in Eastern North America. In *The Nature and Status of Ethnobotany*, edited by Richard I. Ford, pp. 289-299. Anthropological Papers 67. Museum of Anthropology, University of Michigan, Ann Arbor.

Yarnell, Richard A., and M. Jean Black (1985). Temporal Trends Indicated by a Survey of Archaic and Woodland Plant Food Remains from Southeastern North America. *Southeastern Archaeology* 4: 93-106.

Smith, Bruce D. (1985). The Role of Chenopodium as a Domesticate in Premaize Garden Systems of the Eastern United States. *Southeastern Archaeology* 4: 51-72. [Reprinted in *Rivers of Change*, chapter 5; focus on the indicators of domestication, pp. 103-115.]

Smith, Bruce D. (1987). The Independent Domestication of Indigenous Seed-Bearing Plants in Eastern North America. In *Emergent Horticultural Economies of the Eastern Woodlands*, edited by William Keegan, pp. 3-47. Center for Archaeological Investigations, Southern Illinois University, Carbondale. [Reprinted in *Rivers of Change*, chapter 3; focus on "The Domestication of Indigenous Seed Crops," pp. 51-60.]

Smith, Bruce D. (1989). Origins of Agriculture in Eastern North America. *Science* 246: 1566-1571.

Gayle J. Fritz (1990). Multiple Pathways to Farming in Precontact Eastern North America. *Journal of World Prehistory* 4(4): 387-435.

Smith, Bruce D. (1992). Is It an Indigene or a Foreigner? In *Rivers of Change: Essays on Early Agriculture in Eastern North America*, by Bruce D. Smith, pp. 67-100. Smithsonian Institution Press.

Harter, Abigail V., et al. (2004). Origin of Extant Domesticated Sunflowers in Eastern North America. *Nature* 430: 201-205.

Scarry, C. Margaret, and Richard A. Yarnell (2011). Native American Domestication and Husbandry of Plants in Eastern North America. In *The Subsistence Economies of Indigenous North American Societies: A Handbook*, edited by Bruce D. Smith. Smithsonian Institution Scholarly Press.