

## BOOK REVIEW

**Rivers of Change: Essays on Early Agriculture in Eastern North America.** Bruce D. Smith. Washington and London: Smithsonian Institution Press. 1992. Pp. xiv, 320. \$49.95 (cloth). ISBN 1-56098-162-8.

In this important but rather overlong book, Smith presents compelling argument, data, and documentation that eastern North America was a major center of plant domestication before the advent of maize and other Mesoamerican crops. Although this is the book's central focus, along the way Smith deals with the transition from hunting and gathering life ways to a dawning dependence on food production and other topics. Several plant taxa are discussed in the context of early pre-maize agriculture. Four of them, *Chenopodium*, *Iva*, *Cucurbita*, and *Helianthus*, played major roles and they receive a great deal of attention.

The book is organized into four unequal sections: I. Rivers of Change; II. An Independent Center of Plant Domestication; III. Premaize Farming Economies in Eastern North America; and IV. Synthesis. Except for Chapter 4 wherein C. Wesley Cowan and Michael P. Hoffman are co-authors, Smith has authored all 12 essays (terminology of the book's title); actually each is simply a chapter. Four of these have been previously published, one in this journal. When *Rivers of Change* was published, it was noted that two additional chapters "also will appear" in other works. Thus, only five chapters—approximately one-third of the book—were written exclusively for *Rivers of Change*. Many students of early agriculture in the eastern U.S.A. will likely have all or most of this previously published material in their files.

Most of Section III seemed less interesting in content and less interestingly written than earlier and later sections. There are at least two reasons for this: (1) Although I have followed this literature in only the most casual manner, I found I was familiar with much of this previously published material, and (2) Sections I, II, and IV, most of which was written with this volume in mind, is freer of style, without the editorial limitations and other requirements of the various other publication outlets. And, into the bargain, these sections compare and contrast the various theories that have been advanced regarding early agriculture in eastern North America from a historical perspective and taking into account data and interpretations now available as a result of recent archaeological excavations, the latest findings in evolution and genetics and the application of new technologies, e.g., the scanning electron microscope.

There are 33 black and white illustrations and 72 line drawings, most of which I found quite ordinary (striking exceptions: Figure 2.1 Diagrammatic representation of the six interlocking segments of the Floodplain Weed Theory of plant domestication in eastern North America, figures 4.9-12 which are photographs of gourds, and the several figures of scanning electron micrographs). There are no color plates, not even of the four plant taxa discussed in detail, contributing to a book deficient in aesthetic visual appeal.

A couple of minor points: There is a difference in spelling in what appears to be the same archaeological site in figures 3.1, 11.1, and 12.1 (is it Hayes or Haynes?). I must express disappointment with the index, which is admirably complete for plant taxa and without any entries at all for other categories, e.g., archaeological site names, names of investigators and hypotheses or theories mentioned in the text, diminishing its value for reference work.

I recommend this book as background reading to those with a general interest in this topic and as essential reading to those conducting research in this and related areas. The summary and analyses of earlier treatises of pre-maize agriculture in eastern U.S.A. are outstanding. Smith's treatment is provocative, comprehensive, and timely.

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