# INDIGENOUS LIFE Around the Great lakes

→ War, Climate, and Culture

## RICHARD W. EDWARDS IV



Copyright © 2021 Midwest Archaeological Conference, Inc. All rights reserved.

#### CONTENTS

List of Figures

List of Tables

Preface

Acknowledgments

Introduction

- ONE Culture History and Archaeological Background
- TWO Risk Management and Other Theoretical 49 Considerations
- THREE Methods and Methodology
- FOUR Results of Macrobotanical Data Collection
- FIVE Results of Isotopic Data Collection
- SIX The Koshkonong Diet
- SEVEN Regional Dietary Trends
- EIGHT Understanding the Implications of Agriculture
- NINE Risk Management in Oneota Economies
- TEN
   Assessing the Relationship between Agriculture

   and Political Complexity in the Midcontinent

### **ELEVEN Conclusions**

Appendix A: Macrobotanical Data

Appendix B: CSA Isotopic Data

**References** Cited

Index

#### FIGURES

Figure I.1	Location of localities and sites discussed in the text
Figure 1.1.	Regional chronology of Upper and Middle Mississippian Localities
Figure 1.2.	Location of Oneota village sites in the Koshkonong Locality
Figure 1.3.	Map of archaeological excavations at the Crescent Bay Hunt Club
Figure 1.4.	Map of archaeological excavations at the Koshkonong Creek Village
Figure 1.5.	Radiocarbon chronology of the Koshkonong Locality
Figure 2.1.	Modern flooded agricultural fields in Jefferson County, Wisconsin
Figure 2.2.	Diagram of theoretical model
Figure 2.3.	List of theoretical expectations
Figure 2.4.	Map of Koshkonong Locality sites relative to neighboring sites
Figure 4.1.	Box plot of Crescent Bay Hunt Club macrobotanical remains
Figure 4.2.	Box plot of Koshkonong Creek Village macrobotanical remains

Figure 4.3.	Box plot of maize and maize kernel densities (count)
	from Koshkonong sites

- *Figure 4.4.* Box plot of maize and maize kernel densities (weight) from Koshkonong sites
- *Figure 4.5.* Box plot of cultigen densities (count) from Koshkonong sites
- Figure 4.6. Principal components analysis: CBHC vs. KCV
- Figure 4.7. Principal components analysis: Early vs. Late
- Figure 4.8. Principal components analysis: Wigwam vs. longhouse
- Figure 5.1. Box plot of aggregated  $\delta^{13}$ C values: Eastern and Western Upper Mississippian groups
- *Figure 5.2.* Box plot of aggregated  $\delta^{13}$ C values: Early and late Oneota groups
- Figure 5.3. Box plot of aggregated  $\delta^{13}$ C values: Early and late Upper Mississippian groups
- *Figure 5.4.* Box plot  $\delta^{13}$ C values among archaeological cultures and regions
- Figure 5.5. Box plot  $\delta$  <sup>15</sup>N values: Archaeological cultures and regions
- Figure 5.6. Box plot  $\delta$  <sup>15</sup>N values: Early and Late Prehistoric Upper Mississippian
- Figure 5.7. Box plot  $\delta$  <sup>15</sup>N values: Eastern and Western Upper Mississippian
- *Figure 6.1.* Caloric contributions of food sources to modeled diets 119

- *Figure 7.1.* Principal components analysis: Interregional analysis, first and second principal components
- *Figure 7.2.* Principal components analysis: Interregional analysis, second and third principal components
- Figure 8.1. Digging sticks produced from faunal elements
- *Figure 9.1.* Modeled mean temperatures for January and July in Fort Atkinson, Wisconsin
- *Figure 9.2.* Modeled available water, Fort Atkinson, Milwaukee, and Horicon, Wisconsin
- *Figure 9.3.* Examples of bioarchaeological evidence of violent trauma in the Koshkonong Locality
- *Figure 9.4.* Maize kernel-to-cupule ratio through time in the Koshkonong Locality
- *Figure 10.1.* People-plant interactions within the domestication continuum

#### TABLES

Table 1.1. Markers of osteological violence and type of violence

Table 1.2. Radiocarbon dates from the Koshkonong Locality

Table 1.3. Calibrated radiocarbon dates from comparative sites

Table 2.1. List of potential aggregated resources in Wisconsin northern Illinois

Table 3.1. List of primary macrobotanical samples in analysis

Table 3.2. List of sites for comparative analysis

Table 4.1. Structure function: Seasonal and functional criteria

Table 4.2. Structure function: Presence of seasonal and functional criteria in structure types

Table 5.1. Aggregated comparative isotopic data

Table 5.2. Canine bone isotopic results

Table 5.3. Canine bone AMS results

Table 5.4. Summary data for human and dog stable isotope data (  $\delta$   $^{13}\mathrm{C})$ 

Table 5.5. Summary data for human and dog stable isotope data

(δ<sup>15</sup>N)

Table 6.1. Modern nutritional data of four sources known in the prehistoric Koshkonong diet

Table 6.2. Total calorie and protein contributions of each food source in the models

Table 6.3. Koshkonong Locality diversity indices

Table 7.1.  $\delta$   $^{13}{\rm C}$  and macrobotanical density data for all comparative and study sites

Table 7.2. Diversity indices of all comparative and study sites

Table 7.3. Ubiquity values of taxa categories for all comparative and study sites

Table 7.4. Presence of fruit genera by locality

Table 7.5. Distribution of "other seeds"

Table 7.6. Comparison of cultigens in western Wisconsin and Koshkonong Locality sites

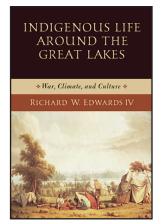
Table 8.1. List of agricultural sites in the Koshkonong Locality

Table 9.1. Summary data of excavation and feature count and size for study sites

Table 9.2. List of common responses to raiding present in the Koshkonong Locality

Table 9.3. Maize kernel-to-cupule ratio through time

### **OPEN ACCESS: MCJA Book Reviews Volume 46, 2021**



# Indigenous Life Around the Great Lakes: War, Climate, and Culture

By Richard W. Edwards IV. 2020. <u>Notre Dame Press, Notre Dame.</u> 283 pp. Paperback (\$45.00), Hardback (\$125.00), eBook—Web PDF and EPUB (\$35.99).

Metin I. Eren, Department of Anthropology, Kent State University

Edwards' *Indigenous Life Around the Great Lakes* is excellent. Although I have co-authored a couple studies on Late Prehistoric-era stone technology from the Midwest, I am by no means an expert on the period, cultures, or analyzed artifacts present in the book. Nevertheless, it was plainly

evident to this reviewer that Edwards penned a *tour de force* from which I learned much and enjoyed the journey along the way. According to the preface, *Indigenous Life* represents the first of a new archaeological monograph series, Midwest Archaeological Perspectives (MAP), which is a joint venture by the University of Notre Dame and MAC, Inc. If Edwards' work is any indication of the direction that this series is headed, then the field of Midwestern Archaeology can look forward to many more years of robust, exciting research published in monograph form.

The wonderful thing about *Indigenous Life* is its tight and clear structure, which stems from a hypothesis-driven and quantitative approach. In effect, this monograph is a journal article that is given room to breathe. In an era where word limits in "top" journals force authors to pack, stuff, and cram data and analyses into supplementary materials (sometimes with detrimental effect on the review process, science, and public consumption), Edwards' tome is a welcome and timely reminder for us all that robust science is more important than immediate "impact," and that good science will eventually glean impact over the *longue durée*. Edwards sets up his questions, subject background, theoretical orientation, and methods in the Introduction and first three chapters before presenting two meaty results chapters. He concludes with what I would identify as five "discussion" chapters in which he explores the results via intra- and inter-cross-cultural comparisons. A final "conclusion" chapter summaries the work and ties the research together with a nice, neat bow.

Using both preserved macrobotanical specimens and isotopic data, Edwards tests the how agriculturally oriented people were at the Koshkonong Locality in southeastern Wisconsin, an important site within the Oneota cultural complex. Edwards succeeds in answering this question, concluding that "the residents of the Koshkonong Locality were maize agriculturalists" (p. 211). Edwards' definitive conclusion is possible because he does not depend on non-specific generalizations, but instead does the hard work of viewing the Koshkonong data and results within a frame of archaeological sites over space and across time. The "risk management" angle present throughout the volume also works well and could easily be expanded into an explicitly evolutionary approach in the future if Edwards or another researcher chooses to do so. I especially loved reading the analysis and conclusions regarding the influence of enemies versus environment on Koshkonong settlement and lifeways, the former acting as more of a threat when compared to the latter.

There are gobs of data presented throughout the book, presented in tables as well as two appendices. The figures are clean and easily interpreted, and any reader cannot help but admire the care that went into the igures depicting the Principal Components Analyses (PCA), which can often be a mess but here are a pleasure to look at and contemplate. The index is compact, but complete.

In sum, Edwards' *Indigenous Life* is an achievement, and one that I recommend to archaeologists studying any time period or place.