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978-0-521-80167-6 - The Backbone of History: Health and Nutrition in the Western Hemisphere

Edited by Richard H. Steckel and Jerome C. Rose

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The Backbone of History

For the same reasons that explorers of the early twentieth century strove to reach the poles and the highest peaks, and their modern counterparts journey to outer space or deep into the oceans, most people want to visualize the contours of the human experience – the peaks of adaptive success that led to human growth, expansion, and flowering of civilization, and the valleys of despair in which human presence ebbed and retreated. *The Backbone of History* defines the emerging field of macrobioarchaeology by gathering skeletal evidence on seven basic indicators of health to assess chronic conditions that affected individuals who lived in the Western Hemisphere from 5000 BC to the late nineteenth century. Signs of biological stress in childhood and of degeneration in joints and in teeth increased in the several millennia before the arrival of Columbus as populations moved into less healthy ecological environments. Thus pre-Columbian Native Americans were among both the healthiest and the least healthy groups to live in the Western Hemisphere before the twentieth century.

Richard H. Steckel is Professor of Economics and Anthropology at Ohio State University. His most recent publications include *Health and Welfare during Industrialization*, which he coedited with Roderick Floud, and *A Population History of the United States*, coedited with Michael Haines.

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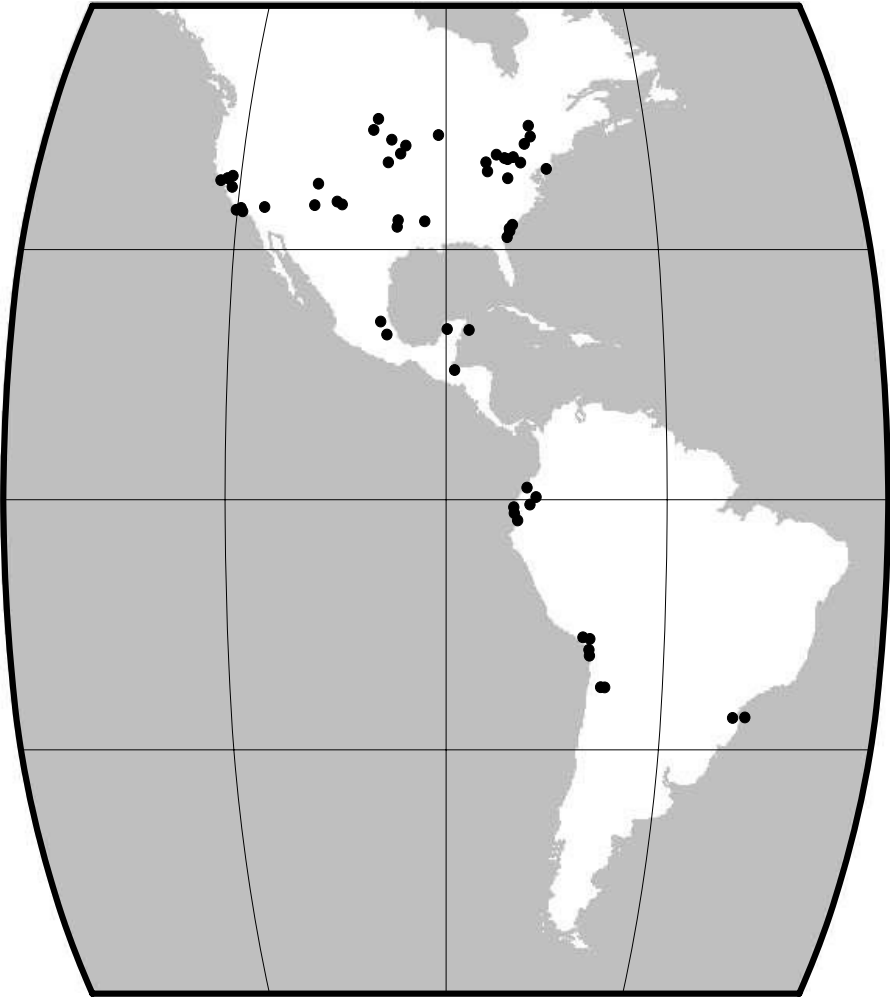
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Localities of burial sites.

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The Backbone of History
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Western Hemisphere

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Preface

From a practical point of view, this project stems from the 1988 Economic History Association meetings held in Detroit, for which Winifred Rothenberg organized a session on the Neolithic Revolution featuring papers by anthropologists George Armelagos, Alan Goodman, Debra Martin, and Jerome Rose. Familiar with the research on stature by economic historians, Jerome had contacted Richard Steckel prior to the meetings to arrange for discussion of common interests in the health and nutrition of the black population. Over coffee, they agreed that the fields of economic history and physical anthropology had much to learn from each other, but they also lamented the impediments to communication. Although using data of interest to historians, physical anthropology journals published rather technical articles, which often focused on skeletons from narrow geographic sites of excavation and which assumed considerable training in human biology. Ordinary historians could not read, much less contribute to, this vehicle of publication. Similarly, physical anthropologists were largely untrained in issues and methods of interest to historians and were unfamiliar with the conventions of publication in that field.

Nevertheless, Steckel and Rose sensed that an important research opportunity was available. The quincentennial of 1492 was just around the corner, which would help focus research interests in both fields. The issue was how to bring the groups together for interdisciplinary research. They organized a small planning conference, funded by Ohio State University and by the Wenner-Gren Foundation, at Ohio State University in the fall of 1990. The historians and physical anthropologists who came all agreed that a truly comparative project would require: (1) introductory training of historians in methods of physical anthropology, focusing on the meaning of skeletal lesions; (2) pooling of skeletal data from numerous physical anthropologists to obtain sample sizes of sufficient analytical interest; (3) a common data-reporting format, because while working for an entire career on, at most, a score of skeletal collections, physical anthropologists often devised their own, sometimes idiosyncratic reporting schemes, which hindered true comparability of results across time, space, and ethnic groups; (4) a methodology for integrating

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information and assessing health using skeletal data; (5) interdisciplinary research teams, each headed by an historian and a physical anthropologist, that would reinterpret the prehistory/history of a particular region, time period, and ethnic group based on the new skeletal database (and other relevant sources); (6) a publication vehicle, such as a conference volume, which defined and illustrated concepts in ways that made results accessible to a larger audience.

This approach to studying the past coalesced in the form of grant proposals by Steckel, Rose, and Paul Sciulli. The National Science Foundation (SBR-9223781) and Ohio State University (through the L. Edwin Smart Lecture Series in Economics, the College of Social and Behavioral Sciences, and the Anthropology Department) together sponsored a much larger second meeting of nearly 40 participants at Columbus, Ohio, in September of 1993. The conference featured training for historians in methods of physical anthropology; a session devoted to a common data-reporting format; a session on methodology in interpreting skeletal data; organization of research teams; and time devoted to administrative matters. The grants also paid for assistance in coding data in the format devised at the conference.

After the assembling and cleaning of the data sent to Ohio State University by 16 physical anthropologists and additional co-workers, the combined database of 12,520 individuals was ready for analysis in the late summer of 1995. This development was an essential prelude to the second major conference sponsored by the National Science Foundation (SBR-9423435) and held March 7–10, 1996, in Columbus, Ohio. This gathering featured presentation and discussion of papers on topics as diverse as nineteenth-century poorhouse populations of the Northeast and the transition to settled agriculture in the Mississippi Valley. The skeletal materials underlying these papers provide not only age at death and stature, but also numerous aspects of chronic conditions such as arthritis, dental health, and infections. Moreover, skeletal evidence is widely available for “historic” periods from cemetery excavations, which enables scholars to compare and contrast health as seen through skeletons with data from written sources. Pooling the evidence collected in numerous local studies allowed investigators to compare skeletal health not only within but also across widely disparate populations. This volume consists of the revised papers from the second conference.

We are indebted to numerous scholars for their advice and encouragement. From the project’s early stages, George Armelagos, Jane Buikstra, Philip Curtin, Herbert Klein, Kenneth Kiple, and William Pollitzer made numerous valuable suggestions. Lois Carr, David Feeny, Anne Grauer, Kenneth Kiple, George Milner, Susan Pfeiffer, Mary Lucas Powell, William McNeill, Larry Neal, Cecilia Andrea Rabell, Carole Shammas, Daniel Scott Smith, Alan Swedlund, and Dennis Van Gerven ably served as discussants or session chairs at the conferences, or in other ways contributed their thoughts on aspects of the project. Nancy Tatarek and Christopher Barrett provided valuable research assistance. Several conference presentations helped sharpen ideas and refine the analysis, including those at the National Bureau of Economic Research, the Economic History Association meetings, the Social Science History Association meetings, the meetings of the American Association of Physical Anthropologists, and the Twelfth Congress of the International Economic History

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Association. Seminars at numerous universities were also quite helpful in developing thoughts presented in the book, including those at Harvard University, University of Michigan, University of Kansas, University of Arkansas, University of Illinois, Indiana University, the Stanford-Berkeley Economic History workshop, Ohio State University, University of Colorado, University of Toledo, Colby College, and the University of Munich Preconference for the Twelfth Congress of the International Economic History Association.

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