

The Bioarchaeology of Agriculture in the Prehistoric Southern Levant



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The Educational and Cultural Affairs Fellowship which I held at the Albright Institute this year gave me access to world-class bibliographic resources in Jerusalem as well as to an international community of scholars, both of which proved invaluable as I worked on my dissertation entitled: “The Bioarchaeology of Agriculture in the Prehistoric Southern Levant.” Over the past several years, I have conducted a variety of research projects. This work has primarily investigated the prehistory of the southern Levant, where I have spent more than a year excavating, collecting data, and undertaking research as a graduate student at the University of Cambridge working with Dr. Jay Stock.

My interest in this area of scholarship began as an undergraduate at the University of Notre Dame where I started a project with my former advisor, Dr. Susan Sheridan, studying patterns of violence in antiquity. By examining human skeletal remains for evidence of traumatic injury, this research has provided the first direct evidence of violence derived from the Early Bronze Age archaeological record in the southern Levant and has added key data to a long-standing debate over the prevalence of conflict-related strife corresponding with early urban nucleation in the region. While at the Albright, I was able to finish work on this study, which will be published as a 10,000-word article in *American Anthropologist* in 2013.

The majority of the research I did during my fellowship, however, focused on the shift from hunting-and-gathering to agriculture. Although there are a number of prehistoric loci of domestication throughout the world, with evidence of cultivation dating to 21,000 years before the present, the southern Levant is the oldest. Thus, the region is the ideal place to study arguably the most important socio-cultural, technological, and subsistence change undertaken by *Homo sapiens* in its earliest manifestations.

In past decades, researchers reached somewhat of a consensus on the impact of agriculture on prehistoric populations. They concluded that farming had a variety of negative consequences because of over-reliance on staple crops, poor sanitation, exposure to zoonotic diseases, and other factors. I do not dispute this general trend, but feel strongly that more geographic and temporal resolution is needed.

At least eight species of plants and all the major livestock animals were domesticated in

the southern Levant in antiquity according to archaeological analyses of botanical evidence and faunal remains; this differentiates the region from areas where populations were reliant on single staple crops.

My MPhil research, which compared skeletal remains of Natufian hunter-gatherers from sites along the Carmel Ridge to remains of Bronze Age agriculturalists from Jericho, found evidence for a broad dietary strategy at Jericho, and that both groups were highly mobile, but no evidence for a marked decline in health in the later period. These results suggest that agriculture impacted people differently in the southern Levant than in other regions. Because of the success of this research, which was recently published in a volume by British Archaeological Reports in Oxford, I am currently expanding this project into a Ph.D. dissertation and eventually, several associated articles.

During the course of my Ph.D., I have examined the remains of more than 1,000 individuals from more than a dozen archaeological sites across a period of approximately 11,000 years (14,600–3,650 years before the present). I look forward to the completion of this work in the coming months. I would like to thank Dr. Seymour Gitin, the Albright Board, and Albright staff for the opportunity to advance my research while living in residence at the Albright Institute as an Educational and Cultural Affairs Fellow. It has been a tremendous honor.

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