

Kua'āina Kahiko: Life and Land in Ancient Kahikinui, Maui. Patrick Vinton Kirch. Honolulu: University of Hawai'i Press. 2014. 310 pp. 77 illustrations, 3 maps, 6 tables. Cloth. \$49. ISBN 978-0-824-83955-0.

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This captivating volume builds upon more than 17 years of archaeological, ethnographic, geographic, and demographic research by the “Dean of Hawaiian Archaeology,” Dr. Patrick Kirch, along the dry, windswept leeward coast of Kahikinui, Maui, Hawai'i. Kirch combines autobiographic accounts of his many years in Kahikinui with serious archaeological research in a way that is extremely accessible to a wide range of audiences. Kirch's special relationship with the *kama'āina*, or residents of the land, as well as his anecdotal prose, should make his book appeal to a general readership while still being instructive to specialists in Hawaiian archaeology, history, and the natural sciences.

Kirch herein lifts a veil from the discipline of archaeology to allow the general public to see how archaeology is conducted. The book interlinks the practicalities of field archaeology with scientific examination of material findings, building toward understanding the landscape and occupational change through time. The intensively investigated Kahikinui area of Maui exemplifies the varied details of a major research project.

The book covers many topics, but centers on Kirch's quest to uncover the entire settlement pattern and history of a community that lived productively in a seemingly marginal, dry environment. He uses this data to defend resettlement of the area by contemporary Hawaiian beneficiaries. Archaeology and oral histories are the main tools used to understand what transpired on the landscape, here presented in a narrative of the past lifeways of Native Hawaiians who settled these lands over a 400-year period.

Multiple threads are woven throughout Kirch's autobiographic sketch of his time in Kahikinui, including his desire to understand the past through the stone structures and cultural materials left behind, the traditional lore of the area, and the battle of contemporary residents to reoccupy these lands. The self-

reflexive account provides a nice memoir for Kirch's many students who worked at various points during the project's long duration, but it works most powerfully as a record of one of Hawai'i's longest-running archaeological projects. This research has intense relevance for the Native Hawaiians who today live on these lands. The archaeological record presented in this book proves what Native Hawaiians have been saying all along in their discussions with government officials: “Our ancestors thrived in this environment and so can we.” They just need water!

This research is compelling not only because of the questions being explored and the methods of obtaining answers, but also because of the almost Pompeii-like nature of the archaeological landscape, from coastline to uplands. The sites are exceptionally well preserved, as if they had been frozen in time. As Kirch succinctly states about this extremely rare situation, Kahikinui “is one of the few places in the islands where an entire *moku* can still be viewed, explored, studied, more or less in the state that it had been for centuries. . . . In Kahikinui one can still see, not just disjointed fragments of this past time, but how an entire landscape once functioned as an integrated socio-ecosystem” (p. 261). In brief, Kahikinui presents great potential for research across a large, unspoiled swath of land reminiscent of older Hawai'i prior to the physical, economic, social, and political transformations of the modern era.

The saga of the *maka'āinana* (commoners) living in Kahikinui is threaded throughout the book. Indeed, those from the *'āina* (land) are the true beneficiaries of the knowledge gained through the research. Today, the descendants of those who built and occupied this landscape since the A.D. 1400s are reclaiming the lands of their ancestors. Archaeological sites across the landscape are given meaning through painstaking study by Kirch and his many students who worked on the

project over the years. This meaning is ascribed to changes in the social and natural environments. In the end, Kirch shows that these windswept lands were indeed home to a strong ancestral community in the past and that they could be occupied again.

OVERVIEW

The strengths of the book lie in its exceptional writing, the evidence supplied to support hypotheses and conclusions, and the interesting topics of discussion. Kirch offers good explanations for Hawaiian words and the Hawaiian language glossary is easy to find and use at the end of the book. Although the text is a bit small for print publication, the chapters are short enough to allow for decisive, quick reading. The cover art and line drawings are also excellent, especially for nonarchaeologists interested in seeing what archaeological field maps and sketches look like.

Kirch delightfully conveys a sense of what it is like to be an archaeologist working in the Hawaiian Islands. He portrays the daily tasks and difficulties often encountered by archaeologists, especially in hot and arid leeward areas such as Kahikinui. Readers learn about the many conceptual tools archaeologists use to interpret what they find on and below the ground and analyze inside specialist laboratories. Readers further learn how advancements in archaeological science were integrated into the Kahikinui project over the course of 17 years. For example, Kirch added the precision of uranium series dating of coral to the corpus of radiocarbon dates and added global positioning systems and geographic information systems to the now old-fashioned alidade mapping methods.

Among the very few drawbacks of this book is the small size of the text and photographs. The reader is forewarned of the indistinct photographs in a caveat at the beginning of the book about the difficulties of field photography. Nevertheless, increasing the size of the pages to accommodate larger text and photographs would be preferred in later editions if feasible.

This book is primarily a cultural history of Kahikinui. Given Kirch's apparent goal of

engaging a broad readership, it is not surprising that theoretical positions are treated only minimally. Chapters on theory would have undermined the multiple premises of the book, as well as made it less appealing to its intended audience. Although these themes are not explicitly developed, theoretically inclined archaeologists may detect processualist undertones. Kirch explains in the Preface that he aims to test a "core/periphery" hypothesis in Kahikinui. He suggests on page xvi that the "hotbeds of historical dynamism in Polynesia were not the core regions, but the marginal lands." This hypothesis is not addressed in this book in detail, however. It appears to be something that has been or will be published shortly in a more scholarly venue.

CONTENT

The book is well organized, with chapters presented somewhat chronologically, beginning with the impetus for the project followed by chapters discussing the time spent in Kahikinui. The results of Kirch's archaeological and archival investigations accumulate from chapter to chapter.

The prologue introduces readers to Maui and local areas near Kahikinui. Most importantly, it introduces us to the *kama'āina* who today struggle to inhabit the lands of their ancestors, as discussed throughout the book. By intertwining several cords of *olona* (rope) representing current understanding of past occupation and use of the Kahikinui landscape along with Native Hawaiians' hope for future use of their ancestral lands, the Prologue encapsulates the thesis of the book. Although it was probably not Kirch's original goal to support these people in their fight to demonstrate that their arid lands are livable, his painstaking archaeological research should convince readers that a thriving community once occupied the area and could do so again.

The first two introductory chapters provide a primer on Hawaiian archaeology and background information on the impetus for the project. These short chapters establish a timeline for the rest of the book and introduce the individuals who most influenced Kirch in the field and his career.

In the following chapters, we learn more about the history and people of Kahikinui and Kirch's archaeological project. Chapter 3 describes the natural environment of Kahikinui, including its geological formation and vegetation regimes. This chapter sets the tone for studying how humans adapted to this environment. It is important to understand that the pre-Contact Kahikinui environment differed from the environment today, since this is discussed later in the book, especially in chapters 8 and 12.

Chapter 4 describes the planning that went into undertaking archaeological fieldwork in Kahikinui. It also introduces Ka Ohana o Kahikinui (Native Hawaiian activist group for Kahikinui) and the difficulties Native Hawaiians have had in convincing State agencies to return their right to live on their ancestral lands. Chapter 5 goes into the nuts and bolts of archaeological work, principally involving the detailed recording of archaeological sites/features over many years of fieldwork that culminates in an immense database. The real treat is a discussion of what constitutes a site versus a feature and how archaeologists classify anthropogenic rock formations on the land, particularly in a landscape containing thousands of such features. Researchers often use archaeological jargon subjectively, so it was a pleasure to read a solid discussion of how sites/features were classified specifically for the Kahikinui project. As discussed on page 67, Kirch's recording system was modeled after Preziosi's (1979) *The Semiotics of the Built Environment: An Introduction to Architectonic Analysis*. It provides systemic fluidity to the classification system. This discussion allows Kirch to articulate his view of the landscape as representing cultural space.

After covering space in chapter 5, Kirch addresses time in chapter 6 by discussing radiocarbon dating, use of archival records, and other methods for determining when sites were formed, occupied or utilized, and abandoned. He justly refers to the archaeological landscape as a "palimpsest" in examining the ways in which a landscape is modified and used over long periods of time.

Archaeological themes are interspersed with stories of the past in chapter 7, which discusses the importance of understanding

Hawaiian traditions when doing archaeology. Kirch relates a *mo'olelo* (oral traditions, story) about links between Hawai'i and Tahiti.

For this reader, the most fascinating chapter in terms of archaeological interpretation and land use is chapter 8, "Farming the Rock." Kirch describes how pre-Contact settlers of these harsh, rough, lava-strewn lands harnessed minimal hydrological output and dealt with shallow soils to create a sustainable subsistence base. It is a fascinating study of the various ways water comes on to a landscape, blended with traditional knowledge about when, where, and how to plant crops. Any archaeologists who work in Hawai'i for even a few years have encountered such dry, leeward landscapes containing various agricultural features; they should be encouraged to read this study. This chapter is the backbone of the book since it demonstrates that by successfully adapting their subsistence regime to the harsh environment, Native Hawaiians were able to occupy these lands and form a strong community that lasted for hundreds of years.

The next two chapters introduce the archaeological excavations at Kahikinui and present intriguing empirical evidence from house sites and the archaeological midden. To the credit of Kirch, the excellent work of his students is forefronted, especially in chapter 10. Their excavations produced a major data set profoundly useful for interpreting the past. Despite the shallow soil horizons, it is amazing how much information has been recovered over the years. This data enables Kirch to establish links between pre-Contact domestic life in Kahikinui and life in the post-Contact historic era. The text moves from purely archaeological descriptions of what was found into the sociological realm of prehistoric daily life. Kirch describes how Kahikinui occupants lived hundreds of years ago and the traditions that defined how they lived. For example, he demonstrates that men and women had separate cooking houses.

The demographic history of Kahikinui is discussed in chapter 11. The population estimates are supported by theoretical models and empirical data derived from archaeological site interpretations and excavation, as well as archival records. Of particular interest is

how Kirch's conclusions match his reading of the more reliable historical accounts for the area, but are quite different from the population estimates made by missionaries and early explorers.

In chapter 12, Kirch returns to the argument first addressed in chapter 8 about the importance of water in this dry, leeward environment. He presents solid scientific data to demonstrate that the environment has changed over time. In the past, the area had enough water resources to allow for sustained occupation. Kirch notes, however, that the water in this arid area was probably never wasted and every drop had to be accounted for. Since the landscape today seems even more hydrologically challenged than in the past, this lesson should be heeded by those of us alive today.

Chapter 13 is a fascinating account of investigating the most prominent of all Hawaiian archaeological sites, the *heiau*. Kirch discusses the construction styles, orientation and angles, and locations of these monumental religious sites, all of which inform us about the purpose of these structures. These sites also provide insight into local knowledge and relationships with the gods. Of additional interest is the discussion of uranium-thorium dating of coral offerings at many *heiau* in the project area. Given that it is very difficult to prove when coral was placed at a specific location as an offering, I have been skeptical about this dating method, but Kirch and his students provide convincing results. I suspect that the use of uranium-thorium dating will greatly increase in Hawaiian archaeology and perhaps elsewhere after commercial laboratories are established to handle the demand.

In chapter 14, Kirch discusses the sociopolitical importance of *heiau* in the area as part of the Hawaiian state. This chapter should be especially interesting for the general reader as it weaves together descriptions of the locations and types of archaeological sites in Kahikinui with the gods, seasonal cycles, ritual building, and traditional lore.

Chapter 15 bridges the crucial gap between pre- and post-Contact times. Kirch discusses how western influences affected the Kahikinui area and residents during this major transition. He concentrates on the post-

Contact land division reform known as the Mahele. Kirch raises the curious question of why only one resident of the area made an official land claim during the Mahele.

Chapter 16 is about the intriguing cultural reuse of older archaeological sites. For instance, a *heiau* (temple, ceremonial site) is described as having been utilized at a later date as a residence. Kirch articulates his speculations about the reuse quite well.

The last chapter of the book tells the story of how Kahikinui lands came to be abandoned through no fault of the residents. Stories of unscrupulous land agents in Hawaii during the 1800s abound and Kahikinui is no exception. The hordes of cattle that moved into the area also displaced residents, consumed the water, and made the place even less habitable. Kirch emphasizes that "the land became silent" (p. 257).

However, the land was not silent for long, as Kirch indicates in the Epilogue. He wraps up the book by discussing the current residents of Kahikinui and their likely future. He also emphasizes the massive educational potential that still remains in investigating this area, just as it did decades ago when Kirch, Chapman, and their colleagues ran along the windy slopes viewing Kahikinui through an archaeological lens. The Epilogue is an inspirational finish to a stimulating book.

The book ends with some useful appendices and references. The "Mapping the Land" appendix provides details about the cartographers of Hawaiian lands, particularly Kahikinui, and gives specific map references for those interested in researching more on the topic. The appendices "Place Names" and "Hawaiian Word Glossary" are also important for appreciating the content of the book. References, smartly organized by chapter, will be useful to anyone wanting to learn more about each topic.

CONCLUSION

If one of Kirch's goals was to provide an autobiographical account of doing archaeology in a small corner of Hawai'i over an extended period of time, then he succeeded. This book presents the professional journey of one of Hawaiian archaeology's most re-

nowned scholars. Full of scientific information and cultural investigation, the large data sets are neither overwhelming nor too technical for the general reader. Anecdotes sprinkled throughout the book lighten the mood whenever the science becomes too serious. From cover to cover, the information here should be useful for all archaeologists working in Hawai'i and anyone interested in archaeology or Hawaiiiana in general.

Just as the archaeological descriptions and the depictions of the ancestral people who lived in Kahikinui were interesting, so was reading about *na kua'āina*, those Native Hawaiians keeping the spirit of the land thriving, who befriended Kirch. They help each

other promote the history of Kahikinui while working together to enable permanent settlement of the area in the modern era.

This book, at its heart, portrays a gratifying, symbiotic relationship between archaeological researcher and community. Kirch walks firmly in Kahikinui, and those who live there have indeed been most welcoming.

REFERENCES CITED

- PREZIOSI, DONALD
1979 *The Semiotics of the Built Environment: An Introduction to Architectonic Analysis.* Bloomington: Indiana University Press.