IS IT A HOUSE?



Archaeological Excavations at English Camp San Juan Island, Washington

EDITED BY Amanda K. Taylor 🖑 Julie K. Stein Burke Museum of Natural History and Culture Research Report No. 9

IS IT A HOUSE?

Archaeological Excavations at English Camp, San Juan Island, Washington

Edited by Amanda K. Taylor and Julie K. Stein

Burke Museum of Natural History and Culture Research Report No. 9

> Burke Museum Seattle, Washington

Distributed by University of Washington Press, Seattle and London

Copyright © 2011 by the Burke Museum of Natural History and Culture Printed and bound in the United States of America

All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopy, recording, or any information storage or retrieval system, without permission in writing from the Burke Museum of Natural History and Culture.

Library of Congress Cataloging-in-Publication Data

Is it a house? : archaeological excavations at English Camp, San Juan Island, Washington / edited by Amanda K. Taylor and Julie K. Stein.

p. cm. — (Burke Museum of Natural History and Culture research report ; no. 9) Includes bibliographical references.

ISBN 978-0-295-99147-4 (pbk. : alk. paper)

1. English Camp Site (Wash.) 2. San Juan Island (Wash.)—Antiquities. 3. San Juan Island National Historical Park (Wash.)—Antiquities. 4. Excavations (Archaeology)—Washington (State)—San Juan Island. I. Taylor, Amanda K. II. Stein, Julie K. III. Burke Museum of Natural History and Culture.

F897.S2I7 2011 917.97'74—dc23

2011019849

The paper used in this publication meets the minimum requirements of American National Standard for Information Sciences — Permanence of Paper for Printed Library Materials, ANSI Z39.48-1984.



Contents

Contributors vii

Acknowledgments ix

- 1. Introduction 1 Amanda K. Taylor and Julie K. Stein
- The 1950 Excavation of OpD by Adan Treganza
 J. Tyler Faith
- 3. Field Methods 21 Mary Parr, Laura S. Phillips, and Julie K. Stein
- Paleotopography and Stratigraphy 29 Julie K. Stein, Amanda K. Taylor, and Phoebe S. Daniels
- 5. Sediment Analysis 45 Julie K. Stein, Debra K. Green, and Sarah Sherwood
- 6. A *Chaîne Opératoire* Analysis of the Flaking of Stone 65 *Angela E. Close*
- 7. Ground Stone Artifacts 89 *Chin-yung Chao*
- 8. Bone and Antler Tools 95 *Catherine Foster West*
- 9. Faunal Analysis: Mammals 103 Cristie M. Boone
- 10. Faunal Analysis: Birds 117 Kristine M. Bovy

- 11. Faunal Analysis: Shellfish 137 Phoebe S. Daniels
- 12. Faunal Analysis: Fish 151 Robert E. Kopperl
- 13. Conclusion 169 Amanda K. Taylor

Contributors

Cristie Boone Anthropology Department UC Santa Cruz 361 Social Sciences 1 Santa Cruz, CA 95064 cboone@ucsc.edu

Kristine Bovy Department of Sociology and Anthropology University of Rhode Island 507 Chafee Building Kingston, RI 02881-0808 kbovy@uri.edu

Chin-yung Chao Institute of History and Philology Academia Sinica Nankang, Taipei 11529 Taiwan cooper@asihp.net/cooper@mail.ihp.sinica.edu.tw

Angela Close Department of Anthropology Box 353100 University of Washington Seattle, WA 98195-3100 aeclose@u.washington.edu

Phoebe Daniels University of Washington Press PO Box 500096 Seattle, WA 98145-5096 phoebea@u.washington.edu J. Tyler Faith Center for the Advanced Study of Hominid Paleobiology Department of Anthropology The George Washington University 2110 G Street, NW Washington DC 20052 tfaith@gwmail.gwu.edu

Debra K. Green Metcalf Archaeological Consultants, Inc. PO Box 2154 Bismarck, ND 58502 dgreen10@uic.edu

Robert Kopperl NWAA/SWCA Environmental Consultants 5416 20th Avenue Northwest Seattle, WA 98107 rkopperl@northwestarch.com

Mary Parr Past Perfect Software 3000 N. Pottstown Pike Suite 200 Exton, PA 19341 mary@museumsoftware

Laura Phillips Burke Museum of Natural History and Culture Box 353100 University of Washington Seattle, WA 98195 lphill@u.washington.edu Sarah Sherwood Department of Anthropology Dickinson College P.O. Box 1773 Carlisle, PA 17013 sherwood@dickinson.edu

Julie Stein Burke Museum of Natural History and Culture Box 353100 University of Washington Seattle, WA 98195 jkstein@u.washington.edu

Amanda Taylor Department of Anthropology Box 353100 University of Washington Seattle, WA 98195-3100 aktaylor@u.washington.edu

Catherine Foster West Department of Anthropology National Museum of Natural History Smithsonian Institution PO Box 37012 Washington, DC 20013-7012 foster.west@gmail.com

Acknowledgments

The San Juan Island Archaeological Project has been supported by many people over the years between excavation and publication. This book summarizes the excavation of one area within the boundaries of San Juan Island National Historical Park - English Camp, referred to as Operation D (OpD). This area is a large shell midden preserved in a forested area near the shore of Garrison Bay, adjacent to glaciated upland, and composed of obvious geometric, topographic ridges. OpD was primarily excavated in 1988, 1990, and 1991. Material was processed over the next 10 years, and analyzed in the last 20. Most of the people studying the collections never excavated the site. They did, however, visit the location numerous times, and discussed the results in classes, retreats, and over beverages. This book is an assemblage of those people's hard work, creative minds, and considerable assistance. We thank all of our contributors for their energy and inspiration.

Our thanks begin with those who supervised the excavation and taught the students. These staff provided an engaging educational experience for students from all over the country who attended the University of Washington field school. The staff primarily responsible for supervising the OpD excavation in 1988 (a year when both OpA and OpD were excavated simultaneously) was Meg Nelson, Mary Parr, and Fran (Whittaker) Hamilton. In 1990, the staff members were Tim Canaday, Kim Kornbacher, Mary Parr, Eric Rasmussen, Patty Rasmussen, and Kris Wilhelmsen. In 1991, they were Martha Jackson, John Kendra, Kim Kornbacher, Sarah Sterling, and Kris Wilhelmsen. Thank you for your work and especially your notebooks that allowed the analyses described in this volume to be completed.

The following individuals were students who contributed their hard work to our research efforts. The

1988 students who worked on both OpA and OpD included Kari Aunan, Edward Bakewell, Deborah Blehm, Robert Bohus, Karen Carmer, Helen Cullen, Amy Eggler, Dottie Foskin, Kathryn Frost, Kirk Ghio, Dennis Gosser, Montgomery Nelson, Shannon Paulsen, Coral Rassmussen, Celeste Ray, Katherine Russell, Amy Sievers, Heidi Thorsen, Della Valdez, and Annemarie Williams. In 1990 the students were Eric Bangs, Sherstin Busby, Annell Chambers, Elizabeth Clappi, John Daly, Marie Dion, Andrew Fahlund, Connie Grafer, Tim Hunt, Erica Kaplan, Craig Magaret, Sherry McLaren, Jane Orvis, Laura Phillips, Laurie Schild, Johonna Shea, Edna Thaler, and Claudia Vergnani Vaupel. In 1991 the students were Jenny Ball, Shannon Bouton, Julie Drummond, Amy Glick, Brad Hafford, Michelle Huntley, Cyndi Johansen, Paula Johnson, Anne Lessmann, Katie Mitchell, Michele Parvey, Shannon Plank, John Ross, Chrisoula (Chris) Roumeliotis, Heather Seal, David Shapiro, Elizabeth (Beth) Simpson, Peter Smith, Brad Snowdon, and Rachel Stallings. Many of these students have continued working on shell middens and archaeology in the Northwest.

In addition to students, OpD was excavated with the help of many volunteers, especially in 1988 when Fran (Whittaker) Hamilton started the first excavations at the site with a volunteer crew. We would like to thank Debra Blehm, Tony Cagle, Stan Chernicoff, Amanda Cohn, Rinita Dalan, Jerome Hawkins, Rick Hilton, Kathy Kornbacher, Elonna Lester, Angela Linse, Mark Madsen, Tony Neimann, Pat Ryan, Teresa Schuwerd, Ann Stevenson, Barbara Terzian, Nancy Todd, Irene Warner, and George Warner.

This research was only possible because the personnel at the San Juan Island National Historical Park supported and assisted with the operations. We would like to acknowledge the Superintendents, Richard Hoffman (1990) Robert Scott (1991-1998), Cicely Muldoon (1998-2002), and Peter Dederich (2002-present), and the help with information and logistics of Chief Ranger William Gleason, Interpretation Staff Detlef Wieck, Michael Vouri (Chief Interpreter), Darlene Wahl, Joshua Boles; and Resource Managers Shirley Hoh, Bill Gleason, Chris Davis, and Jerald Weaver. Mike Vouri was especially helpful throughout the years and we would like to give him a special thank you.

At National Park Regional Headquarters we are especially appreciative of the support from Stephanie Toothman, Jim Thomson, Kent Bush, Diane Nicholson, and Kirstie Haertel. We could never have navigated the NPS systems without your help. At Marblemount collection facility we are grateful to Camille Evans, Deborah Wood, Brooke Keleman, and Kelly Cahill for help with the collections.

No one suffered our interruption more than the archaeological curation staff at the Burke Museum. We would like to thank Curator of Archaeology Peter Lape, collections managers Mary Parr, Laura Phillips, Megon Noble, collections staff Steve Denton and Kelly Meyers, and especially our NPS cataloger Walter Bartholomew.

Many students at the University of Washington worked on this project, helping us prepare this book. We would like to thank Shelby Anderson, Phoebe (Anderson) Daniels, Jacob Fisher, Stephanie Jolivette, Becky Kessler, Chris Lockwood, and Jennie Deo Shaw. We also acknowledge our gratitude to our friends and family for their help, support and patience over the course of this project, especially Stan, Matt, and David Chernicoff and Matt Saunders. They will share our joy at the completion of this project.

Lastly we would like to thank the members of the Lummi Nation for sharing their history, and for their insights and understanding.

IS IT A HOUSE?

Archaeological Excavations at English Camp, San Juan Island, Washington



I Introduction

Amanda K. Taylor and Julie K. Stein

This chapter provides context for archaeological investigations at OpD, English Camp, San Juan Island, Washington. As shown in the photograph above, the site is characterized by a horseshoe-shaped shell midden in a forested area approximately 20 meters northwest of the modern shoreline. The research goal of this volume is to assess whether OpD should be interpreted as a domestic structure using multiple material types and perspectives. In this introduction, we describe previous research on house sites in the Gulf of Georgia and summarize the chapters in this volume.

Houses are essential to understanding social phenomena on the Northwest Coast. Differences in house size are associated with differences in political power and social inequality; the appearance of large villages is associated with sedentism and population growth. The layout of hearths, benches, and walls provide clues about the daily activities of the people who lived in the houses (e.g., Grier 2001; Matson et al. 2003; Sobel et al. 2006). Our volume asks a more basic question about prehistoric houses in the Gulf of Georgia. In the absence of preserved wooden architectural features, how do archaeologists recognize house structures in complex shell midden deposits? Further, how do they determine what is inside and what is outside the house, and how to evaluate those distinctions? As noted by Schaepe (2003) and Moss and Erlandson (1992), inadequate critical analysis of features at Northwest Coast sites that are assumed to be houses precludes the identification of other functions associated with a structure. The chapters in this volume explore these issues for the Operation D (OpD) site at English Camp, San Juan Island, Washington (Figure 1.1).

The OpD shell midden is part of the English Camp shell midden (45SJ24) at San Juan Island National Historic Park. The National Park Service (NPS) cre-

ated the park in 1966 to preserve the American and British military outposts occupied from 1859 to 1872 (Thomas and Thomson 1992; Vouri 1999). This location was originally referred to by the British as British Camp, but local residents later changed the name to English Camp. In 1985, the NPS officially changed the name back to British Camp, but in recent years the residents of the community successfully convinced the NPS to rename the park English Camp. Since the historic occupation was located in the same general area as the prehistoric occupation where a large shell midden accumulated, the prehistoric site (45SJ24) has been referred to as both English Camp and British Camp. Both names refer to the same site. The prehistoric English Camp site is an immense shell midden with variable surface expression. A portion of the site on the historic parade ground that did not show any topographic or stratigraphic evidence for house structures was called Operation A (OpA) and the details of this work have been previously reported (Stein 1992). A portion of the site with horseshoe-shaped topographic ridges is called OpD. The focus of this publication is the question of whether or not OpD represents a domestic structure.

The English Camp midden has been the focus of two research efforts. In 1950 A. E. Treganza excavated

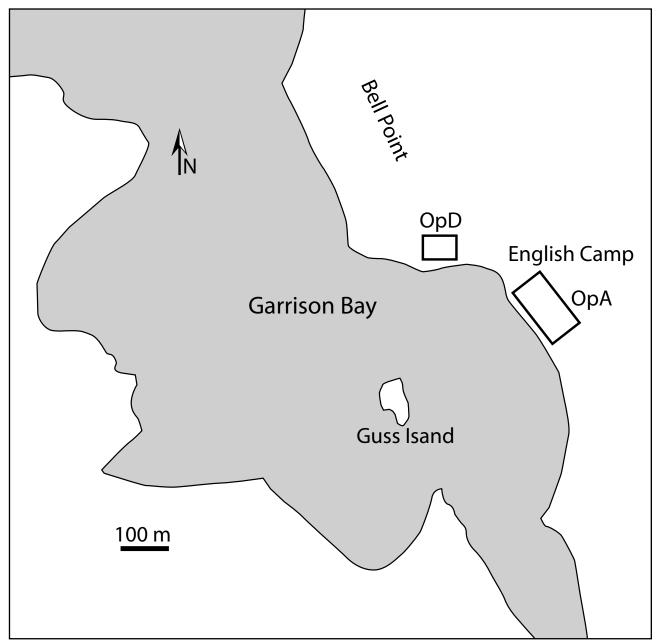


Figure 1.1 Location of English Camp OpA and OpD on Garrison Bay.

in the area of OpD (Faith, this volume Chapter 2) as a University of Washington field school. In 1985, Julie Stein directed a small group of students who were part of the excavation at OpA to explore the edge of a "barrow pit" at the request of NPS personnel. The barrow pit was believed to be the handiwork of the original settler, William Crook. The area was named OpD and students excavated a 1 x 1 meter test unit (Unit I). In 1989, OpD was augered to determine the thickness of the shell midden and the topography of the underlying landforms (Stein and Taylor, this volume). Stein directed excavations at the site in 1990 and 1991. The surface topography at OpD is similar to other shell midden sites around the world where topographic expressions suggest that prehistoric people processing and discarding shell were purposefully sculpting the surface of their landscape. The results are often displayed as circular or elliptical mounds, linear or curved ridges, or circular rings surrounding depressions. These features are interpreted as outlines of domestic structures, defensive barriers, or unknown architectural features. The research reported in this publication focuses on a portion of the OpD shell midden that defines just such a topographic feature. This particular shell midden was piled into roughly

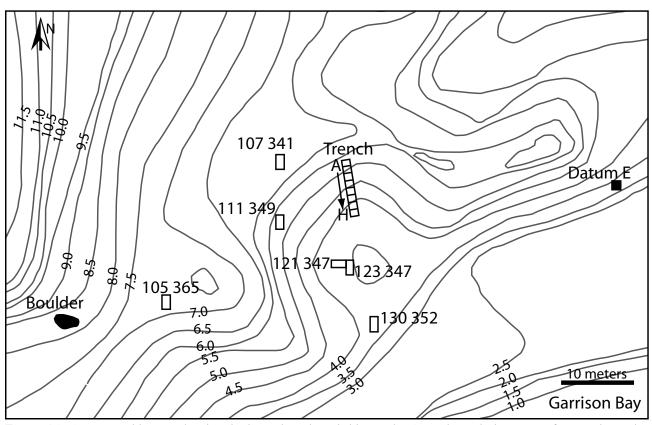


Figure 1.2 A topographic map showing the horseshoe-shaped ridge at the OpD site and placement of excavation units. Modified from a map drafted by Fran Hamilton.

three ridges, arranged in a horseshoe shape with the opening of the horseshoe facing the water. One possible interpretation of this topography is that the ridges piled around the outside walls of a domestic structure. People would have lived in the middle with the entrance facing the water. After the wooden walls collapsed, the shell midden would have slumped into the central area of the house and covered the edges of the living surface. The excavation of OpD was proposed to test that explanation and therefore excavation units were located in the ridges, in the central depression, and behind the ridges (Figure 1.2).

We note that in the Gulf of Georgia literature, excavation and lab analyses are not always designed to explore whether topographic features in shell midden represent houses. Rather, the identification of a house is based usually upon similarities to the ethnographic record and common sense. Topographic house features include shell ridges, depressions, bench features, and flat platforms. Supporting stratigraphic information focuses on floor deposits, post holes, post molds, hearths, and walls. Excluding OpD, there are nine well-documented "house sites" in the Gulf of Georgia/Puget Sound region: Beach Grove (DgRs1), Crescent Beach (DgRr1), Dionisio Point (DgRv3) False Narrows or Senewélets (DgRw4), Long Harbour (DfRu44), Pender Canal (DeRt1 and DeRt2), Shingle Point (DgRv2), Tualdad Altu (45-KI-59), and Whalen Farm (DfRs3) (Figure 1.3). There may also be evidence of a house structure at the Marpole site; however, this site is insufficiently documented to evaluate the evidence. Below we review the ways in which investigators at various Gulf of Georgia "house sites" have identified and described cultural deposits associated with houses.

At the Beach Grove site in the Fraser Delta area near Tsawwassen, Harlan Smith noted 11 circular depressions in 1921. He and his team interpreted the topographic features as plank houses where middens formed around the structures, resulting in three meter tall U-shaped ridges around the depressions. Midden was about one meter deep in the depressions, and they were identified as "house platforms" (Ham 1980; Matson et al. 1980). D.G. Smith (1964:4-5) describes the site as "a long mound of undulating contour and profile, a series of humps and hollows strung out along what appears to have been an old strand-line." One of the goals of the 1980 excavation directed by R.G. Matson was to determine if the depressions were truly used as houses. Uncertain whether their excavations cross-cut a U-shaped area, researchers found several post molds but only one the size of

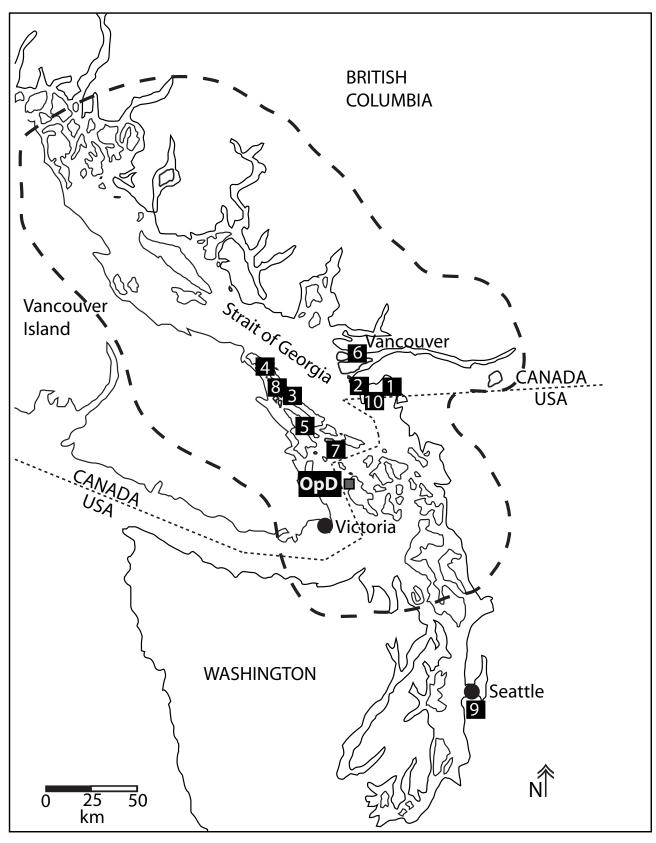


Figure 1.3 The Gulf of Georgia area defined by Mitchell (1971) modified from Grier (2001). 1-Beach Grove, 2-Crescent Beach, 3-Dionisio Point, 4-False Narrows, 5-Long Harbour, 6-Marpole, 7-Pender Canal, 8-Shingle Point, 9-Tualdad Altu, 10-Whalen Farm.

In contrast to Beach Grove, at the Crescent Beach site near Vancouver, British Columbia, only one potential domestic area was identified by R.G. Matson's field school in 1990. "Feature 9" was identified as a house by shape and stratigraphy rather than topography. It was a large semi-circle 3.5-4.5 meters in diameter with a 35 centimeter thick layer of mussel shell with markedly denser shell than adjacent deposits. Large cobbles and fire-cracked rock were also present. That the feature might be a hearth was ruled out because of the size and because orange ashy deposits were not found throughout. Investigators also identified four potential post molds and came to a tentative conclusion that the feature was a shallow semi-subterranean house (Matson 1996; Matson et al. 1991).

Dionisio Point is located on northern Galiano Island, one of the Gulf Islands off of the coast of British Columbia. Five house depressions have been identified at this site, and as part of his dissertation work, Colin Grier (2001, 2003) conducted excavations at one house and a small portion of another. The topography here is particularly complex in that four of the depressions are located on terraces that create steps in the slope. Ridges of shell are built up around the perimeters of the depressions, and post holes, post molds, hearths, and pit features were noted during excavations. Grier (2001) also discusses the differences in stratigraphy between silty black shellpoor house deposits and the shell-rich deposits outside. The details provided about surface topography and stratigraphy support a convincing argument that the features at Dionisio point were domestic structures.

The False Narrows site on Gabriola Island off of Vancouver Island was first excavated by Donald Mitchell (1966), who observed two large platforms that he associated with house structures. Mitchell excavated several units and John Sendey of the BC Provincial Museum expanded the investigation in 1967. Along with house platform areas, investigators also excavated an area identified as a dump at the northern edge of cultural deposits. Burley (1989) notes that Mitchell did not document the house platforms in detail and that the scarcity of post molds and apparent "nonarchitectural function" of some of these features makes interpretation difficult. Current information about the topography and stratigraphy of the site by the excavators may not be sufficient to determine the nature of the structures.

At the Long Harbour site on Saltspring Island, British Columbia, David Johnstone (1991, 2003) reports four mounds. In an excavation of one of these high areas in Layer 4 of Stratum 4, his interpretation of the stratigraphy and features at the site is that midden was piled outside the walls of a house. He notes that post holes have two size ranges: small (10-12 centimeters in diameter) and large (25-30 centimeters in diameter). There are large cobbles in the walls of the post molds. The eight small post molds are arranged in an eight meter long line at the foot of an area of redeposited till that may represent the back wall of the house. The larger holes have been interpreted as posts that supported the roof. The excavation was not large enough for the beachward wall to be recovered, but hearth features are located in the probable center of the structure. Johnstone also found evidence for subsistence, including steaming pits, a refuse pit, and two areas of high concentrations of boiling stones. In non-house areas, shell was sparse and highly fractured consistent with trampling.

At the Pender Canal sites (DeRt2) located on Bedwell Harbour, Pender Island, British Columbia, Johnstone (2003) notes that five post molds 20 centimeters in diameter spaced one meter apart extend in a line over six meters. He describes a 40 centimeter thick shell midden adjacent to the line of post molds that appears to have been banked against the wall or perhaps cleared away during the construction and interprets this feature as a "curtain wall" rather than a row of roof supports. At nearby DeRt1 on Browning Harbor, Johnstone reports seven post molds defining a 5 x 6 meter rectangular area. In the corner of the structure is a box made from sandstone slabs. A hearth feature lies in the center of the structure and a steaming pit and clay lined pit are adjacent to the structure (Johnstone 2003).

An excavation of one of at least three prehistoric house depressions was directed by R.G. Matson at the Shingle Point site on Valdes Island in the Gulf Islands, British Columbia. The excavated house depression was built into the back of a beach ridge composed of shellfish remains. At 76 meters square, the excavation uncovered over half of a house. Excavators identified the structures through a floor, post holes, U-shaped bench areas along the walls of the house, and a hearth (Matson 2003). Matson emphasizes what the stratigraphy reveals about the dimensions of the house and architecture. He also notes differences in the stratigraphy inside the depression, outside the depression, and below the house floor.

The Tualdad Altu site on the Black River near Seattle, Washington is a village site with several longhouses. James Chatters (1989) describes the results of coring over 68% of the site and the discovery of two linear hearth clusters thought to be associated with longhouses. Similarities in features and artifacts between the excavated hearth clusters with those of the Sbabadid house, an historic longhouse site, are cited to support the interpretation that the hearth clusters were located in a longhouse (Chatters 1989:174). Firecracked rock clusters between the hearths are thought to be entryways and middens are thought to be dumps. Chatters notes that no post molds or evidence of walls were found.

At the Whalen Farm site on the eastern shore of the Point Roberts Peninsula, British Columbia, Thom (2008) reports that early investigators found two midden ridges that follow the contour of Boundary Bay. They range in size from low mounds to ridges three meters above the ground. During his investigations in 1925, Harlan Smith noted a row of large, deep pits at the site. In 1949 and 1950, Borden and his team excavated a trench across the ridge. They described hearths and molds but were unable to identify clear patterns in the architecture based on these remains. Later excavations by Dimity Hammon uncovered hearths and a storage pit (Thom 2008).

For several of the sites discussed above, lack of detail in notes provided by the original investigator and disturbance due to historic and modern development make it challenging for current investigators to understand the prehistoric topography. As a result, it may be difficult to determine whether a set of features resembles, rather than represents, a domestic structure. Distinguishing house depressions from storage pits and natural topography may be more complex than previously assumed. Shell ridges may result from the construction of defensive structures, refuse, and natural beach ridges. For example, at Whalen Farm, the description of the shell ridges suggests that they vary in size and shape across the site and may not be associated with the depressions. At several sites, such as False Narrows, post molds did not appear to be "architectural" and it was difficult to determine how excavators identified them.

In this volume, we seek to address this issue by examining cultural materials, sediment, and stratigraphy inside and outside the U-shaped depression at OpD. The general expectation underlying all of the chapters in this volume is that if the surface topography at OpD represents a house, there should be significant differences between the cultural deposits in the depression, within the shell ridges, and outside the shell ridges. This volume also serves as a descriptive text to disseminate information about the excavations at this site. All artifacts, samples, field notes, and other information relating to the University of Washington field school at OpD are housed at the Burke Museum at the University of Washington.

The chapters in this volume provide descriptions and analyses of material remains from OpD using a variety of methods at a variety of scales. The first set of chapters detail excavation methods and the geoarchaeology of the site. In Chapter 2, J. Tyler Faith reviews the original 1950 excavation of OpD by Dr. Adan Treganza and compares the results of this excavation with those of the more recent excavations directed by Julie Stein. In Chapter 3, Mary Parr, Laura Philips, and Julie Stein discuss in detail the field methods used during Stein's excavations at OpD. They provide a brief history of Stein's excavations, followed by a description of excavation procedures from the project's Standard Operating Procedure manual. In Chapter 4, Julie Stein, Amanda Taylor, and Phoebe Daniels detail mapping, augering methods, dating results and stratigraphy within each excavation unit. They use both landscape-level and site-level analyses to investigating whether OpD was a domestic structure. In Chapter 5, Julie Stein, Debra Green, and Sarah Sherwood provide an analysis of OpD sediment including loss-on-ignition, micromorphology, grain size analysis, and chemical tests.

The second set of chapters detail the artifacts found at OpD. In Chapter 6, Angela Close provides a *chaîne opératoire* analysis of chipped stone artifacts from the site. In Chapter 7, Chin-Yung Chao describes the commonly found groundstone tool types of the Northwest Coast and offers a summary of the OpD assemblage in particular. In Chapter 8, Catherine Foster West describes and analyzes the spatial distribution of bone and antler tools across the site.

The final set of chapters details the faunal remains found at OpD. In Chapter 9, Cristie Boone presents an analysis of the mammal bone found at OpD. In Chapter 10, Kristine Bovy describes in depth the bird bone assemblage from OpD, providing first a descriptive summary of the types of birds represented at the site and then presenting quantitative analyses of those remains. In Chapter 11, Phoebe Daniels analyzes the shellfish remains, and Robert Kopperl presents a similar analysis of the fish remains at OpD in Chapter 12.

Each contributing researcher described and analyzed material remains from OpD in such a way that it would be relevant to the question, "Was OpD a house?" This volume presents their work and provides a final synthesis of their findings in Chapter 13. We hope that this volume will be a valuable resource for researchers who work in the Gulf of Georgia and for archaeologists designing excavation and analysis strategies for potential domestic structures.