

How Can Community Engagement in the Local Past and Archaeological Research Be
Mutually Beneficial? A Case Study in Community Archaeology from Sauvie Island,
Oregon

by
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Abstract

Community archaeology's broader objectives include increasing public understanding of archaeology and making archaeology more relevant to people's day to day lives. Fulfilling these goals could be beneficial to the public in terms of their gaining more agency in, and more access to, archaeology; and it could be beneficial to archaeologists in terms of increasing public support for archaeological work. While many community archaeologists report success, few authors critically evaluate the experience and outcomes of community archaeology. As a result, little data-based understanding exists about what is gained through community archaeology. This project explores that question through three primary means: 1) a community archaeology field research project on Sauvie Island in Portland, Oregon, in which I interview public (n=16) and professional (n=6) participants before and after their involvement in fieldwork, 2) interviews with local professional archaeologists (n=15) from various backgrounds, and 3) a broad baseline face-to-face survey of the Portland area public (n=254). The latter two data collection methods provide supporting and comparative information intended to add layers of meaning to the analysis of the Sauvie Island field project participants' thoughts, feelings, and experiences related to the field project.

My results show that the majority of the non-archaeologist public have positive and often enthusiastic attitudes towards archaeology. These attitudes remain or are reinforced through participation in community archaeology. This trend appears to exist irrespective of partial public understandings of archaeology, wherein many members of the public are aware of real aspects of archaeology, but simultaneously express inaccurate perceptions of the nature of archaeology. Archaeologists demonstrate misunderstandings

of the public, particularly in terms of public participation in community archaeology leading to the destruction of sites or the breakdown of scientific rigor. These fears often lack data-based or experiential support, and are less present in archaeologists with more experience working with the public. Generally, archaeologists enjoy interaction with the public in participatory contexts, and see various benefits to public involvement.

My research shows that tying archaeology to present day life, to intimate technical details of the archaeological fieldwork experience, and to engagement with the natural landscape, are crucial aspects of increasing archaeology's relevance to the public. Despite misunderstandings on both sides, mutually beneficial public/professional involvement in community archaeology is possible.

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Chapter 1: Introduction

1.1 Three Problems from the Realm of Archaeology

There are three problems that are of critical importance to the future of archaeology. First, public fascination with the human past often stands in stark contrast with limited public understanding of archaeology (McManamon 2000; Pokotylo and Guppy 1999; Ramos and Duganne 2000; Sánchez 2013). While many members of the public appear to think archaeology is “cool,” and generally support the protection and preservation of our human heritage, the average person has a limited understanding of systematic archaeology. Second, this issue has led some archaeologists to reexamine why they do archaeology, to ponder what role archaeologists play as members of society, and to generally criticize the paucity of clear demonstration(s) of the relevance of archaeological research to day to day human life (Holtorf 2010; Sánchez 2013). Some archaeologists have critiqued the tendency for archaeological discourse to be situated on a metaphorical “lofty pedestal;” often generally inaccessible, and for practical purposes irrelevant, to the lay person (Hodder 1991; Mickel and Knodell 2015). In other words, research about the material human past is often only pursued and shared within academic, scholarly, and regulatory contexts where information flows exclusively among archaeologists. Opportunities to expand this flow of information, and share the potential benefits of archaeological research outside of these contexts are still relatively rare, sporadic, and primarily dictated by archaeologists.

It is more difficult for archaeology to confer its potential benefits to society when the public does not understand how the study of the human material past can inform or

relate to modern life and society. Furthermore, this can also make it difficult for members of the public to contribute to archaeological work. Conversely, from the perspective of an archaeologist, I believe that public interest and support for archaeology is of paramount importance to the future of archaeology. The vast majority of archaeology in the United States is publicly funded (Sebastian 2011). This public funding is inextricably tied to contemporary political, economic, and legal circumstance, all of which are themselves strongly connected back to public support. In other words, a change in, or reinterpretation of, public support, perhaps tied to a change in political climate or accompanied by a sudden scarcity of funding, could easily lead to a change in laws, with the possible end result being most archaeologists in the United States finding themselves unemployed. I argue that archaeology is dependent on public understanding of archaeology and the field's perceived relevance to society,

Acknowledging these overarching issues, many archaeologists seek to educate non-archaeologists, and increase archaeology's relevance and relatability to society, through educational outreach and participatory public involvement in archaeology. This participatory involvement often takes the form of "community archaeology" projects (Atalay 2012; Little 2012; Richardson and Almansa-Sánchez 2015). Community archaeology projects are diverse in nature but generally involve archaeologists relinquishing power and control by incorporating the public in a project's development and/or implementation (see Silverman 2011:155 for a broad definition of community archaeology).

Though highly specific definitions of "community" are not common in community archaeology literature, this type of work usually focuses on archaeology's

participatory involvement with a particular portion of a population. This could be, for example, people living in, or otherwise closely tied to, a specific geographical location (e.g. one of my uses of “community” refers to people living in the Portland area), or people who share specific professional, ethnic, historical, or various other types of social ties. Community archaeology is distinguished from public outreach/education efforts because community archaeology incorporates local public participation and inclusion in archaeological work, which contrasts with public outreach/education’s mostly one-way transfer of ideas and information from archaeologists to the public in contexts often separated from actual archaeological field or lab work.

For the purposes of this thesis, I chose to use the term “the public” to refer to anyone not trained in archaeology by professional archaeologists. The use of this term can be problematic because it not only suggests a stark and potentially dubious dichotomy between archaeologists and the public, but also wrongly conveys a sense that “the public” is just one, static, homogenous entity. However, this distinction between archaeologists and the public is inherent in, and inseparable from, the fundamental existence of concepts like “public archaeology” or “community archaeology,” and in the context of this project, I view it as necessary for any discussion of how to improve or measure the benefits of archaeology, regardless of who is or is not benefiting.

Here, with the rise in popularity of community archaeology, arises the third problem: the degree to which community archaeology is achieving its goals remains largely unclear, and rarely examined. In particular, archaeologists do not understand how community archaeology is, or is not, addressing the issues described above, i.e. limited public understanding of archaeology and archaeology’s ambiguous relevance to day to

day human life. A number of authors have critiqued the direction of community archaeology and questioned the success of community approaches (Burström 2014; Dawdy 2009; Grabow and Walker 2016; La Salle 2010). Critics call for more assessment of community project outcomes (Clack 2011; Guilfoyle and Hogg 2015; Rowe et al. 2014; Simpson 2009) and strategic communication and training (Ray 2009; Tully 2007; Zarger and Pluckhahn 2013). Overall, it is increasingly evident that if the benefits of archaeology to the public, and vice versa, are poorly understood, then the ability of archaeologists to develop mutually beneficial interactions with the public is substantially limited.

1.2 Research Goals

Because of the issues described above, additional examination is required to better understand the interface between systematic archaeological research and the general public. The goal of my thesis is to assess a community archaeology project – not only to understand its successes and failures, but also to critically examine the assessment process itself – and to position this assessment within a broader context of local archaeologists’ and non-archaeologists’ perspectives on related themes and issues. This examination will inform larger questions in archaeology regarding the relevance of archaeology to the general public, and the relationships between perceived relevance, engagement with archaeology, and the success of community archaeology. Two main areas of inquiry guide this research:

- 1) Is a community's engagement with the local past enhanced in any way by involvement with systematic archaeological research through community archaeology? If so, how? If not, why?
- 2) Does an archaeologist gain anything from working with the public? If so, what is gained, and how? If not, why?

To address these questions, I conducted a community archaeology project on Sauvie Island, in the Portland Basin of Oregon (Figure 1), and attempted to trace, through interviews, what was gained by both the members of the public and the archaeologists involved. I collected further interview data from a sample of Portland area archaeologists to enhance the depth of my archaeological project's critical assessment through comparison to these archaeologists' relevant thoughts and experiences. Lastly, I conducted a face to face survey of a sample of the public in the Portland area to establish a broader context for understanding the local public's perceptions, attitudes, and understandings related to archaeology. My data collection methods are presented and explained in detail in Chapter 2.

1.3 Hypotheses

I designed this thesis project with three underlying hypotheses in mind:

- 1) Connections to the local landscape play important roles in the experience of doing archaeology.
- 2) The public is currently uninformed about what archaeologists do, how they are funded, and under what circumstances they are employed.
- 3) Non-archaeologists interact with, and react to, archaeology in complex and variable ways, and professional archaeologists generally operate with a limited understanding of these complexities.

I designed data collection and data analysis to evaluate the evidence, or lack thereof, in support of these hypotheses. Having these hypotheses in my mind throughout the course of the project also shaped the way I led my community archaeology project on Sauvie Island and the participants' experiences there, likely in ways of which I am not fully aware.

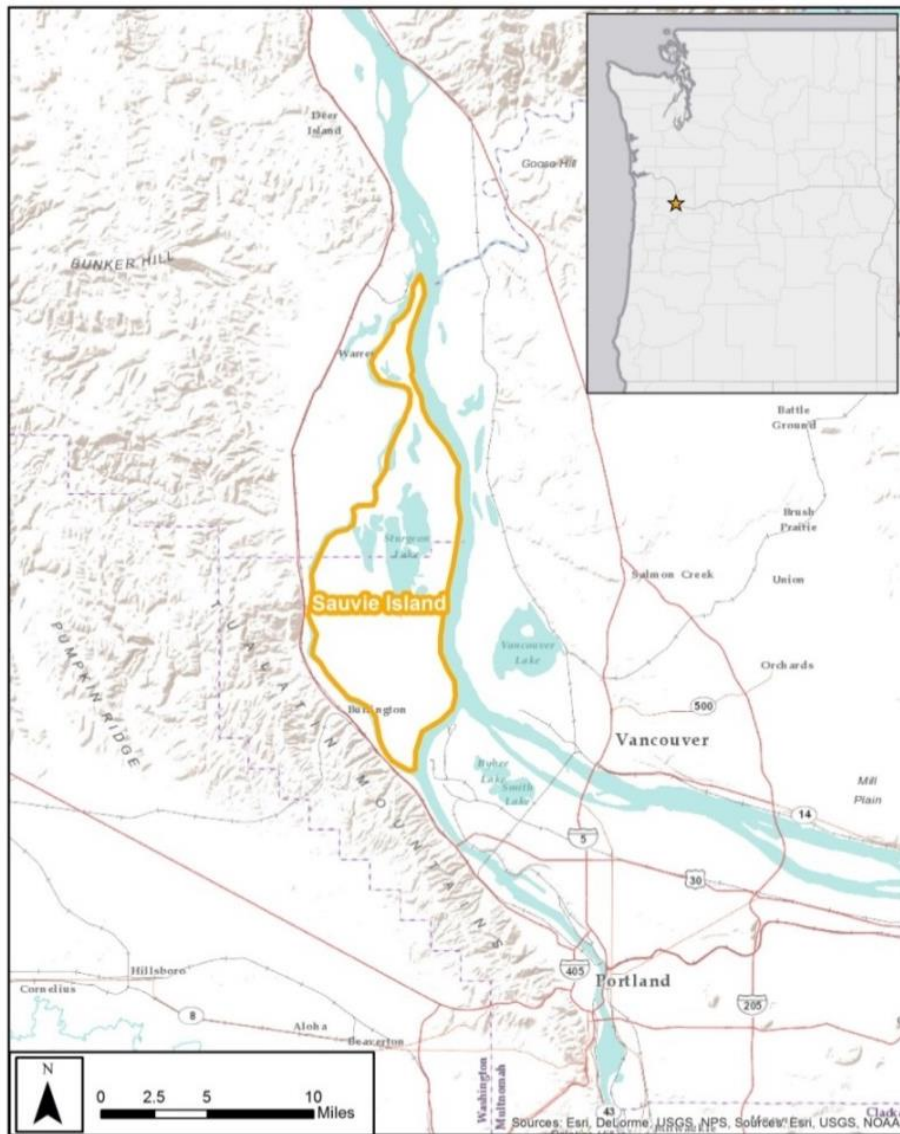


Figure 1 Location of Sauvie Island relative to Portland, Oregon

1.4 Prior Research

The Relevance of Archaeology

I am aware of no previously published, direct examination of archaeology's relevance to different types of people, or the perceived relevance of different types or aspects of archaeology, from the perspective(s) of the public. However, these issues are of potentially great importance to, and inextricably linked with, the development of community archaeology as a subfield. As such, they are often discussed in a general or theoretical sense in the literature. For example, some archaeologists have accused archaeology of being largely inaccessible from outside the discipline, and in many cases, lacking an understanding or acknowledgement of the contemporary social, political, and public contexts within which it operates (Hodder 1991, 2002; McAnany and Rowe 2015). Despite having a uniformly high interest in the preservation of archaeological and historical remains (Merriman 1991; Ramos and Duganne 2000), many members of the public perceive of archaeology as, in certain circumstances, unnecessary and irrelevant (Hodder 1984; Pokotylo and Guppy 2002). For example, in a large survey of the Canadian public, Pokotylo and Guppy (2002) asked respondents to rate, from 0 to 10, the importance of archaeology to six different groups. "The Public" scored the lowest mean value (5.7 out of 10).

This apparently mixed public perspective on archaeology's relevance or value might be a manifestation of larger-scale trends, for example widespread criticism of the relevance of social science degrees (e.g. Gannaway 2015) and efforts to defund high level scientific research institutions (e.g. Bard 2014). Additionally, some authors, speaking

specifically about cultural resource/heritage management, describe the field as intentionally designed to estrange itself from the public interest in order to maintain efficiency of operation, as well as sustain a sense of intellectual control over the past for archaeologists (Dawdy 2009; Waterton 2005).

However, many writers have argued that archaeology can have substantial relevance to the lives of non-archaeologists for a variety of reasons. For instance, several archaeologists (e.g. Little 2012; Mangi 2005) write that the systematic study of the past helps create a valuable basis for constructing human reality by providing information of potential relevance to, among other things, identity and ancestry. Along these lines, some authors suggest that archaeological work can play a role in expelling racism and other lingering manifestations of colonialism from the public psyche in certain contexts (Gosden 2014), or help aboriginal groups gain access to traditional lands (Nicholas 2006). Archaeology can also provide useful environmental information relevant to public policy concerns, for example by suggesting how past aboriginal use of fire might inform the management of forests in the present day (Boyd 1999). Furthermore, as Sebastian (2011) discusses, the public funds a substantial percentage of all archaeological projects in the United States. Therefore archaeology is arguably relevant for the simple reason that every taxpayer contributes to it.

Lastly, many archaeologists have urged their colleagues to heed the desires of the public and focus on research themes that are more relevant to society (Jopela and Fredriksen 2015; Katsamudanga2015). Along these lines, Hollowell and Nicholas (2008) write that many iterations of community archaeology and public archaeological outreach incorporate the notion of increasing archaeology's relevance to the public by not only in

many cases involving the public in actual work, but also often devising research that is specifically relevant to the needs or desires of a community or communities.

The above considerations make it clear that despite a perceived insularity in both academic and non-academic archaeology, archaeology has at least the potential to have substantial relevance to the lives of some members of the public, and that community archaeologists are in a unique position to engage with this issue as professionals working on scientific projects with the public.

The Importance of Connections to the Landscape to (Community) Archaeology

Geographical or natural context often has a profound effect on how humans shape their lives and perceptions (Steele 1981). Findings from a large body of research on this topic, especially in the field of environmental psychology (e.g. Lewicka 2011; Raymond et al. 2010), suggest that a large variety of environmental, social, political, and personal factors affect the relationship between humans and the places they live. “Place attachment,” “space,” and “sense of place” are key phrases discussed in the relevant literature. In cultural anthropology, “space” is usually an abstract term used to illustrate a mathematical or quantifiable delineation within the universe, while “place” refers to the cultural and social perceptions and constructions people develop of space (Lawrence and Low 1990; Low 2017). As Low (2017) discusses at length, different, and often contradictory, ways of using and distinguishing between these two terms abound within literature not only from cultural anthropology, but also psychology, philosophy, mathematics, and architecture. Following Low’s suggestion that choosing a specific

usage of these terms should be dependent on the context of a particular research project, I focus on exploration of “place” in this project.

Under the umbrella of this terminology, numerous authors have explored the relationships between place, nature, landscapes, and community (Lewicka 2011). For example, Raymond et al. (2010) discuss a number of studies suggesting that volunteering at local community projects can be a popular way to foster connections with natural places while strengthening social bonds at the community level. Building connections to landscapes in group settings is often tied to various social concepts, for example identity building and “belongingness” (Raymond et al. 2010: 424). Similarly, Elmendorf and Rios (2008) present a study involving community organization and natural urban landscapes in Philadelphia, finding that positive aspects of natural places, including “health and wellness and symbolic and emotional value...are supportive of the process of community and encourage a community’s capacity to develop” (73).

Various works from cultural anthropology discuss the concept of nature and explore the ways people conceive of, and interact with, the natural world. Many authors argue that nature is a social construct. For example, Escobar (1999) identifies three primary ways in which people conceive of, or present, the idea of nature – organic, capitalist, and techno natures – while making the observation that interaction with the natural world often involves varying and complex combinations of these different constructions of nature. In a similar vein, Cronon (1996) argues that the perception of nature as separate from mankind is not only essentially false, but counterproductive to ecological efforts to protect or improve the environment. These different, *general* ways people perceive of the natural world and their place in it are important ideas to take into

account when trying to understand *specific* connections to the natural world in the context of, for example, a community archaeology project.

Some authors caution that the complicated variability of social contexts and a lack of homogeneity among individuals in a community make understanding people's connections to their natural surroundings difficult – and that researchers attempting to do so need take these factors into account (Riley 1992; Katsamundaga 2015). Ethnicity, socio-economic status, and numerous other potential variables can have an enormous effect on how people see and interact with their natural surroundings. A handful of direct studies of communities have sought to measure and define place attachment, often with the use of survey and questionnaires (Buta et al. 2014; Lewicka 2011; Shamai and Ilatov 2005; Williams et al. 1992; Williams and Vaske 2003). Taken together, many of the findings among these studies are variable and contradictory, but several themes seem to be relatively consistent. For example, while attachment to place is usually higher for certain groups, especially ones who spend a lot of time at, or have long resided in, a certain place, researchers widely recognize the power of place to “serve as a unifying experience among groups separated by time or by distinct cultural identities” (Wright 2015:214).

Furthermore, as Ingold (2000) argues, people make the strongest connections with, and establish deeper constructions of, places that they “move through” (203) and experience sensorially. As an example of this, Wright's (2015) excavation of a prehistoric habitation in a suburban North Carolina neighborhood engendered several conceptual and behavioral transformations in the local residents who made physical, hands-on connections with the 2,000 year old site through observing and taking part in portions of

the work. None of the residents had direct ancestral links to the Cherokee people who once inhabited the area. However, local residents collectively developed a new sense of the landscape by not only thinking about how their surroundings would have been different two millennia before, but also how other people would have had some of the same reasons for choosing to live there as people do now. Local residents also joined together to hold a community event revolving around the site, and to serve as informal site guardians to stand against looting and collecting on the site. Many residents altered their daily routines to include visiting or passing by the site.

Wright's (2015) study demonstrates that building connections to a local landscape – both the contemporary landscape and the past landscape represented by the remnants of those who once inhabited it – can have strong, socially enmeshed repercussions for the experience and outcomes of an archaeology project. Some archaeologists (e.g. Waterton 2005; Wright 2015) discuss this concept of natural places and local community engagement as having meaning in relation to the preservation of heritage and the collaboration between archaeologists and local communities in the specific context of community archaeology. For example, one community project in Britain found that many members of a local community perceive of a portion of the Northumberland National Park not so much as a place for recreation, but more in terms of landscape and historical interaction between the public and the land (Waterton 2005). The author argues that park authorities fail to take these important connections into account in its management policies, including those related to archaeology, and that this failure leads to a feeling of disenfranchisement on the part of the local public.

This general argument for better understanding of local sense of place being important to resource management efforts is supported by many writers both within archaeology (e.g. Clack 2011; Harrison 2011; Jopela and Frederiksen 2015; Katsamudanga 2015; Mickel and Knodell 2015) and outside of archaeology (e.g. Cronon 1996; Elmendorf and Rios 2008; Lewicka 2011; Buta et al. 2014; Spoon et al. 2015). Archaeology provides a physical connection to a place's human past, and because it often occurs or is present outdoors, exploring this human past provides direct connections to the local landscape – natural or manmade, past or present. These connections can be very important to how people perceive of, and relate to, archaeology and their local heritage (Harrison 2011), and by extension, how willing they are to contribute to the study, preservation, and protection of archaeological resources (Wright 2015).

Public Perceptions of Archaeology

Researchers have taken various approaches in trying to describe and measure public attitudes, perceptions and understandings of archaeology, as well as how archaeologists perceive of these things in their own interactions with the public. While some studies present anecdotal evidence from archaeologists themselves (Katsamudanga 2015; Merriman 1991: 96-97; Nichols 2006: 35), more salient results have come from a handful of direct surveys of the general public (DCMS 2008; Hodder 1984; Hodder and Hutson 2003; Merriman 1991; Pokotylo 2002; Pokotylo and Guppy 1999; Ramos and Duganne 2000; Taylor and Konrad 1980) and undergraduate university students (Balme and Wilson 2004; Colley 2005; Eve and Harrold 1986; Feder 1987).

According to this previously published research on the issue, the public's overall understanding of professional archaeology is generally limited. Public archaeological knowledge is characterized in these studies as a generally inaccurate perception of the field originating largely from distorted representations of the field in pop-culture media (Ascher 1960; Colley 2005; Holtorf 2005; Nichols 2006). The nature of the public's perception of archaeology is also dependent on social and geographical variables like education level, access to museums, and exposure to Indigenous heritage (Pokotylo 2002). Results of surveys conducted on museum-goers and undergraduate archaeology students –people who tend to have greater than average access and education in terms of archaeology – reflect a slightly elevated knowledge of, and interest in, archaeology, but largely parallel the patterns described above (Balme and Wilson 2004; Colley 2005; Feder 1984, 1987; Merriman 1991; Szacka 1972). Researchers have sought explanations for these patterns both within archaeology (reviewed in Pokotylo 2002:92) and without (e.g. Merriman 1991: 21; Szacka 1972), with little success at finding definitive answers. Research exploring these patterns is also relatively scarce, and to an extent becoming outdated. - At the time of this writing (2018), the most recent, substantial survey of the public about archaeology published in English (Ramos and Duganne 2000) is now over 17 years old.

Archaeologists' Perceptions of the Public

In most cases, archaeologists concerned with addressing or influencing public perceptions of archaeology argue that increased public involvement and engagement with archaeology continue to define the way forward (Holtorf 2010; McAnany and Rowe

2015). In other words, informing the public and encouraging positive public attitudes towards archaeology and heritage are common mantras of publicly-oriented archaeology endeavors like community archaeology (Atalay 2012). Beyond this, however, little has been published about archaeologists' perceptions regarding the public. Reviewing a number of studies exploring scientists' perception of the public in general, Besley and Nisbet (2011) conclude that scientists generally view the public as largely ignorant of, and uninterested in, science. Additionally, scientists tend to distrust the public and commonly view the public as a homogenous entity. Besley and Nisbet argue that understanding scientists' perception of the public is imperative because scientists play important roles in society as epistemological authorities and policy-makers.

Returning to archaeology, many archaeologists clearly view the public as a potential source of looting and destruction of archaeological remains. For example Proulx (2013) gathered survey data from archaeologists about their perceptions and experiences concerning looting, and found the issue of looting to be of substantial worldwide concern to archaeologists of all types. Turning to community archaeology specifically, some community archaeologists have expressed concern about increased public involvement with archaeological materials, not just because of potential consequences involving looting (e.g. Richardson and Almansa-Sánchez 2015:204), but also because of a fear that people without intensive training may harm archaeological materials in the process of participating in certain fieldwork activities (Shai and Uziel 2016).

Merriman's (1991: 97-97) brief discussion of various archaeologists' notions of public perceptions of archaeology mentions common themes like archaeologists being either rugged explorers or bookish professors, but always exclusive experts on historical

issues, whose main occupation is digging. In a similar vein, Ascher (1960) reviews a suite of *Life Magazine* articles related to archaeology and suggests that the public is particularly interested in the “superlatives” archaeology has to offer. In a similar vein, John Gale (2002) examines two case studies from popular television shows and concludes that the archaeologists are portrayed as “serious, single minded but ever so slightly mysterious quasi-scientists, whose discipline is liberally blessed with large dollops of excitement and discovery” (5). However, to my knowledge, information about archaeologists’ perceptions of the public is limited to anecdotes, indirect observations, and analyses of archaeology’s representation in popular culture described above; and formal or systematic exploration of these perceptions, for example through interviews and surveys of archaeologists, has not been published to date.

Community Archaeology: Need for Assessment

Carol McDavid’s 2002 article in *World Archaeology* describes her successes engaging with a community in Texas and how her project embodied various abstract notions of multi-vocality and the relinquishing of authority over the past by archaeologists. Many descriptions of similarly-framed community archaeology projects from around the world not only epitomize the same triumphant tone, but also neglect to include any self-critique or assessment (Chirikure and Pwiti 2008; Dawdy 2009; Simpson 2008; Richardson and Almansa-Sánchez 2015). Even McDavid herself (2009: 164) admits that “public archaeology has been on occasion a bit over-celebratory.”

Aware of these issues, many archaeologists have called for better understanding of communities – and archaeology’s level of success in reaching them – and many have

argued for more assessment and critique in community archaeology (Clack 2011; Dawdy 2009; Guilfoyle and Hogg 2015; Richardson and Almansa-Sánchez 2015; Rowe et al. 2014; Simpson 2008). Others have posited that community archaeologists rarely actually live up to their outward claims of multi-vocality, gainful public involvement, and/or balancing of power between professionals and the public (Burström 2014; Grabow and Walker 2016; Hollowell 2009; La Salle 2010). Still others decry a lack of communication and coordination amongst a burgeoning cluster of community-minded archaeology projects (Ray 2009; Tully 2007). As Hollowell and Nicholas (2008) point out, a continuous dialogue is necessary to the development of this subfield.

1.5 Geographic Context

In defining the “Portland area” (Figure 2) for this project, I use the United States government’s official definition of what it calls the “Portland-Vancouver-Beaverton, OR-WA Metropolitan Statistical Area,” whose “principal cities” are Portland, Beaverton, and Hillsboro in Oregon, and Vancouver in Washington (OMB Bulletin No. 08-01:45).

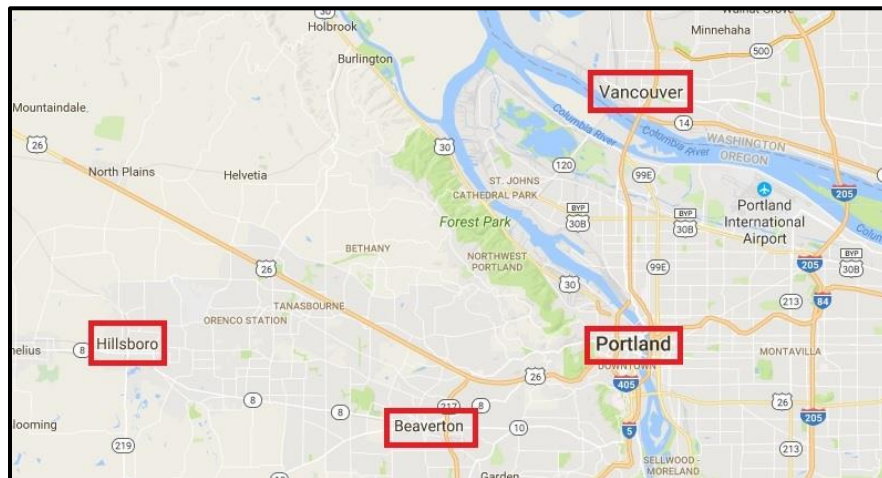


Figure 2 Map showing the Portland area’s four “principal cities”

Several geographic aspects of the Portland area are relevant to this thesis.

Portland is located in the Portland basin, a low-lying alluvial area situated around the confluence of the Columbia and Willamette Rivers in northwestern Oregon (Pettigrew 1981). Various ecosystems make up the surrounding area including marshy wetlands, volcanic mountains, riparian valley bottom, agricultural fields and pasture, oak savannah, and conifer forests (Anderson et al. 1998; Franklin and Dyrness 1988). Environmental issues and the protection and celebration of natural places factor heavily into the Portland area's general psyche (Abbott 2004). Outdoors activities are very popular and access to public lands in the area for fishing, hunting, watersports, hiking, biking, and climbing is considerable. For example, Portland's Forest Park ranks as the 9th largest city park among large U.S. cities, and the city of Portland ranks 15th in the U.S. in amount of spending on parks and recreation per resident (Harnik et al. 2016).

Vegetation cover and alluvial deposition in the area are generally quite substantial, which, taken together with a high annual rainfall (Pettigrew 1981), results in many of the area's historic and archaeological remnants being either covered up or deteriorated due to exposure to the wet climate and dense herbaceous vegetation. In other words, beyond buildings and other intact historic structures, the geography of Portland contributes to the local human past being, relatively to many other geographic areas, somewhat invisible.

1.6 My Positioning

In this section, I briefly discuss my point of view and conceptual positioning in relation to the central themes explored by this thesis. I am a white male in my 30's with

an undergraduate university degree in anthropology, and I have worked as a professional archaeologist in the United States since 2007. I have worked for state and federal agencies as well as numerous private companies. Like most field archaeologists, my work has taken place in a mix of rural and urban settings, and has been comprised of projects which purposefully avoid the public, projects which gladly invite public input and participation, and everything in between. I entered this project with several relevant convictions, particularly that A) the public deserves a bigger role in the study, exploration, and preservation of humanity's physical past than they currently have – in other words, I, like hundreds if not thousands of archaeologists across the world today, would call myself a public archaeologist, and B) that both we archaeologists and the public probably do not know anywhere near enough about each other to take a firm step forward towards improving our relationships and collaborations.

While I could not entirely avoid carrying these convictions with me into this project, I was more than willing to accept whatever my data revealed. If most members of the public thought archaeology was a trivial waste of time, or if archaeologists had a unanimously solid, deep understanding of the public, or if my use of interviews turned out to be a dramatic and fruitless failure – that would still have been good data and useful research. I designed my questions to allow for these and other similar possibilities. As the next several chapters show, my results did in many cases support the notion that the public could and should be more involved with archaeology, and that mixed methods research is in certain instances a useful tool in developing such involvement. But in other cases, my results made me question my convictions. In others, the results raised difficult questions and illustrated unexpected complexities. While, at the present time, I feel I

cannot ever completely erase my bias towards supporting public archaeology, nor my interest in conducting mixed methods research in general, I believe I took adequate precautions to limit my personal biases; influence on the substance of this thesis' research and the analysis and interpretation of my results.

1.7 Thesis Structure

This thesis consists of four chapters and 14 appendices. Chapter 1 covers the issues and research questions my thesis intends to address, my hypotheses and personal positioning going into the project, previous scholarly work on the subject, and several aspects of the project's overall context and broader purposes. Chapter 2 presents my methodology and approach for data collection and analysis. Chapter 3 presents my results and discussion of my findings framed around three main thematic categories, while Chapter 4 summarizes my results, explores problems I encountered over the course of my research and relevant steps I could take in future work, and concludes with a list of recommendations for community archaeologists.

1.8 Project Significance

Gathering and analyzing data concerning my research questions could help move community archaeology beyond the biases, assumptions, and often unsubstantiated claims of success or failure that presently define it in the literature. Critical evaluations of community archaeology will help direct the course of future projects, potentially allowing archaeologists to tailor and improve their efforts to share archaeology with the public, and identify areas where there is the most need for work. Success in such endeavors could produce benefits that extend beyond community archaeology into archaeology and

society at large. To this end, the evaluation and analysis throughout the text of my thesis is intended to serve as a reference for anyone, archaeologist and non-archaeologist alike, interested in engaging with community archaeology. At my thesis' conclusion, I provide a list of specific recommendations for archaeologists based on my data collection in the Portland area, recommendations that are likely broadly applicable to future projects beyond the conceptual and geographic context of this project.

Chapter 2: Research Design and Methods

2.1 General Approach

In this project, I use interviews and surveys to examine archaeology from within the field of archaeology and from without. Many anthropologists and archaeologists in recent years have striven to make their work more relevant and accessible to the public through public, applied, and collaborative projects (Lassiter 2008, Atalay 2012). In some cases, such projects seek to better understand specific aspects of archaeology or heritage through the use of qualitative research, which is usually presented as “ethnography.” While many researchers refer to this type of work as ethnography (as I reflect below while summarizing it), I choose to refer to my work in this thesis as “mixed methods” due to the absence of focused participant observation as a data collection method.

In the literature, the intersection of ethnography and archaeology has many iterations. The most common is the use of oral histories and other ethnographic information to try to better understand *material* aspects of the archaeological record, a practice generally referred to as ethnoarchaeology. However, both ethnographers and archaeologists have employed ethnography in relation to archaeology in several other primary ways that are more relevant to the objectives of this thesis (Benavides 2004; Castañeda 2008, 2009; Edgeworth 2006; Forbes 2007; Hamilakis and Anagnostopoulos 2009):

- As one of multiple methods to develop a holistic understanding of a region, site, community, or landscape in relation to time.

- To measure and describe people’s reactions to or engagement with archaeology, landscapes, and the past.
- To describe and better understand the experience of doing archaeology.
- To assess the progress or effectiveness of (usually community) archaeology.
- To help mold archaeological research objectives around the desires and perspectives of a community or communities – in many cases, Indigenous communities.
- To further understand the ethical, legal, economic, and/or political circumstances and milieus surrounding archaeological projects, approaches, findings, and representations – as well as the presentation of archaeological information.

Various authors have devised labels and categories in which to group the above purposes (Castañeda 2008; Edgeworth 2006; Hollowell and Mortensen 2009). Hollowell and Mortensen make a particularly clear distinction, categorizing archaeology-related ethnographic projects as either being “ethnography in archaeology” (2009:4) which is ultimately aimed at informing the practice of archaeology, or “ethnography of archaeology” which engages non-archaeologists to explore how “things typically defined as archaeological have other lives, meanings, and consequences, often well beyond a disciplinary scope” (2009:6). However, as Castañeda (in 2008: 27) notes, many distinctions and defining phrases like the one above “have no definitive or consistent meaning” and often “refer to the same thing.” Regardless I believe that no one project need be confined to any one conceptual category if experimenting with multiple approaches could prove useful.

The mixed methods portion of this thesis is therefore a combination of both examination *in*, and examination *of*, archaeology. My work is most akin in theory to

Hollowell and Nicholas's (2008:72-73) notion of using ethnography to increase the relevance of archaeology, and in practice to Simpson's (2009) use of ethnography to assess the experience and outcomes of a community archaeology project. Furthermore, this thesis, while utilizing non-archaeological methods, ultimately discusses, informs, and evaluates the practice of archaeology. My purpose is to address "problems from the realm of archaeology" (see Section 1.1).

Lastly, while I made no effort to exclude Indigenous participants from the project – and actually had one public volunteer who mentioned that her close relatives were of local Indigenous decent – I did not focus on specific research questions or objectives related to Indigenous issues or perspectives. I also did not target any tribal organizations with my recruiting efforts. Indigenous concerns are an aspect of community archaeology and ethnography that at times interweaves inextricably with, and at other times parallels closely, the direction of my thesis research. Many archaeology projects involving community collaboration/participation and/or ethnography revolve around Indigenous or descendant communities (Castañeda 2008; Colwell 2016; McNaughton et al. 2016). This is also a topic of substantial personal interest and importance to me. However, given the limited scope of this project and the need for initial, exploratory data to establish a basic foundation for addressing research questions like mine (i.e. concerning the interface between the public and archaeology at large), I decided that focused examination of relevant Indigenous issues deserves closer attention in a subsequent project.

My project consisted of three data collection elements: 1) a community archaeology project and semi-structured interviews of all participants before and after fieldwork, 2) interviews with local professional archaeologists not involved in the

community archaeology fieldwork, and 3) a baseline face-to-face survey of a sample of the Portland area public.

2.2 The Sauvie Island Community Archaeology Experience: Fieldwork and Participant Interviews

The goal of my community archaeology project was to create an experience for the public and professional participants that was A) achievable within the contextual confines of this thesis, and B) an actual archaeological fieldwork situation to serve as a means for assessing participants' thoughts and feelings about the experience of doing archaeology. Towards this end, six local professional archaeologists, 16 public volunteers, and I conducted a two day archaeological surface survey within a variety of different ecological environments in the northern portion of Sauvie Island in Portland, Oregon (Figure 3), and interviewed all participants before and after fieldwork. I present the archaeological aspect of this undertaking as a technical report (available upon request from the Oregon State Historic Preservation Office in Salem, Oregon – title: *A Community Archaeological Survey on Oregon Department of Fish & Wildlife Land, Sauvie Island, Portland, Oregon*).

I considered several important factors when choosing field volunteers for the community archaeology project on Sauvie Island. First, because one of the primary purposes of this study is to identify expectations beforehand, and analyze reactions afterwards, concerning participants' involvement in *this particular* systematic, community-based archaeological project, it was necessary that potential volunteers' prior experience in such activities be very limited. Otherwise, data collected during interviews

could be biased towards the way participants feel and think about past exposure to community archaeology rather than this particular project.

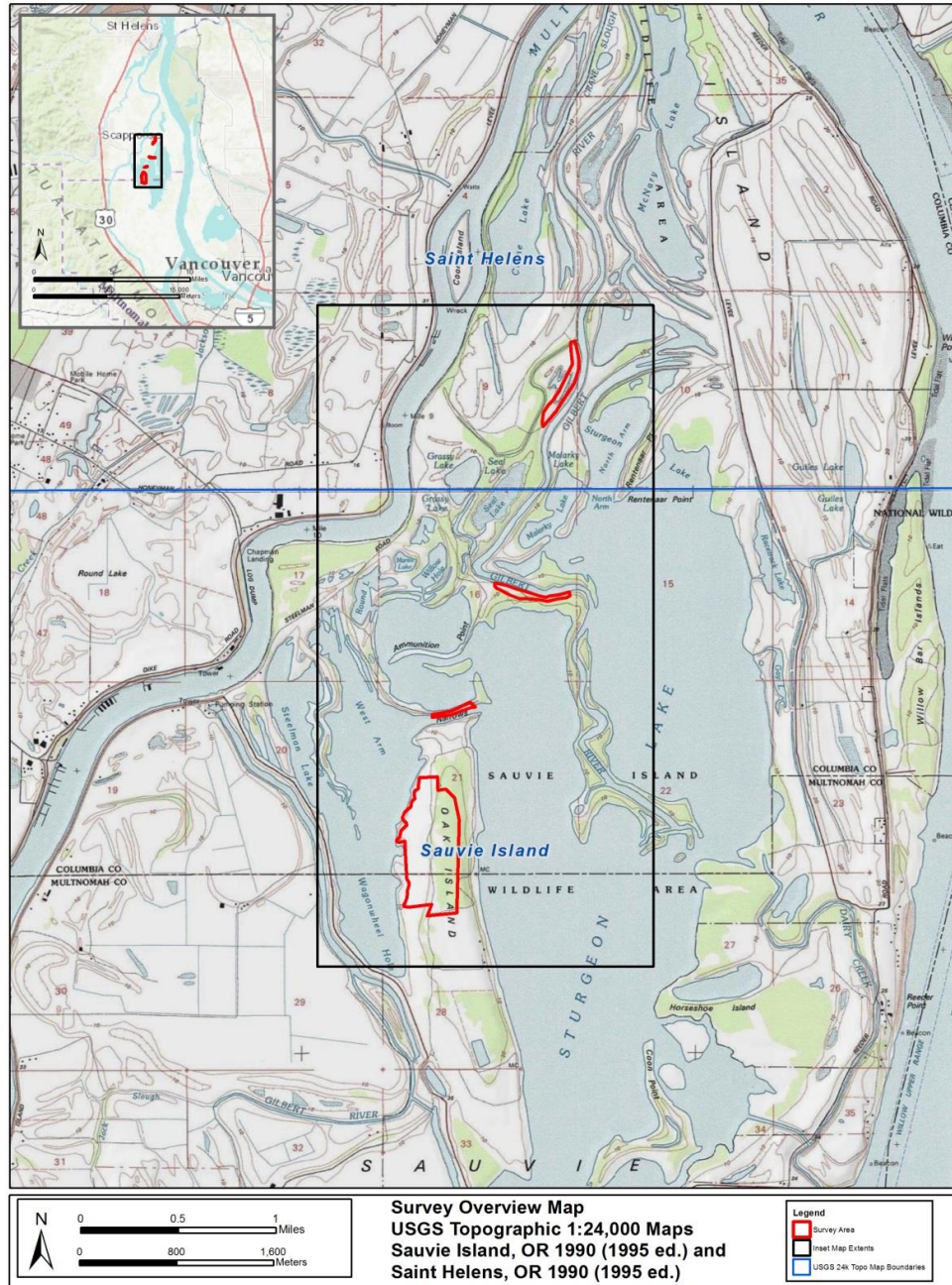


Figure 3 Map showing archaeological survey areas on Sauvie Island

For the public volunteers, I attempted to enlist a group of volunteers with maximum diversity in terms of the following variables: age, gender, education level, connectedness to the land, and attitude towards science. I initially used a brief questionnaire to screen volunteers but found that it deterred potential participants; ultimately, my pool of potential volunteers was small enough that I stopped using the questionnaire and simply assessed the diversity of my volunteer participants by asking them about the above variables. My outreach effort to find public volunteers for the community archaeology fieldwork was wide-ranging. This outreach included extensive posting of flyers throughout the Portland area and on Sauvie Island, word of mouth and soliciting at local clubs/organizations (e.g. the Oregon Archaeological Society, Nehalem Land Trust), and posting calls for volunteers on various websites (e.g. Reddit, Share Oregon), forums (e.g. IFish, Oregon Fishing Forum), Facebook groups, and in community newsletters (e.g. the Sauvie Island Community Newsletter). I did not formally or consistently track how each volunteer heard about the project. However, I can say that in general, all of these strategies elicited at least some response, with calls for volunteers on the social media site Reddit receiving the highest response rate. All participants in this project were at least 18 years old.

Fieldwork

The field project consisted of two, seven hour long days of fieldwork. Each day, participants were split into two crews, and each crew had two professional archaeologists acting as crew leaders. On both days, eight public volunteers showed up, resulting in two crews of four each day, or one crew leader for every two public volunteers. Fieldwork began each day with a relatively informal instruction session lasting approximately one

hour. I provided a verbal overview of Sauvie Island's material human past and common prehistoric and historic site, feature and artifact types found by archaeologists and collectors on the island. I briefly discussed prehistoric subsistence use and settlement patterns on the island, and showed several pictures of common prehistoric artifact types. With the assistance of the crew leaders, I covered the basic survey techniques we planned on utilizing for the project, established pace measurements for the purposes of delineating systematic survey transects, and provided instructions on the use of a sighting compass.

The professional archaeologists assisting as crew leaders were expected to guide public volunteers through the process of surveying, identifying, and recording any finds, as well as offer any additional instruction as necessary during this process. Public volunteers were expected to actively participate in survey, and when finds occurred, to follow instructions from crew leaders and ultimately perform all of the recordation duties. Crew leaders were asked to assist in these duties as needed due to time constraints. In other words, I wanted each find to be thoroughly recorded in order to prevent any possible information loss, and to provide participants with the opportunity to see all stages of recordation and documentation. In several instances, crew leaders assisted with these recordation duties to ensure that a find was fully recorded before time ran out, while simultaneously sharing what they were doing with the public volunteers.

Each crew participated in conducting a mixture of different surface survey types with the basic goal of identifying previously undiscovered archaeological surface finds. This involved a mixture of systematic linear grid transecting at varying interval distances, and non-systematic "judgmental" survey. During judgmental survey, each participant was encouraged to search wherever they thought might be likely areas to find archaeological

materials. This would be based on both the background information I gave about the island and its archaeology at the beginning of the day, and their own instincts and understandings of the landscape.

In addition, feedback and observations were continuously sought from all participants regarding the experience as it unfolded. In one example, a crew I was helping to lead encountered a long, discontinuous line of milled wood fragments in a cow pasture near the edge of a river. Every participant there, including myself, worked together to try to delineate this feature's physical extents, and determine its origin. Many of us, including myself, initially suspected these fragments might represent the remains of an old fence line. Ultimately, after hearing several ideas from various participants, we agreed that one public volunteers' explanation – that the line of wood was the long-weathered remnants of a very high water, modern flood event in the nearby river – was the most likely explanation. All four crews located and recorded potential archaeological materials, and three out of four crews located and recorded previously undocumented archaeological sites. The fourth crew only located two potential archaeological finds, one of which was recorded as an isolated find.

The field experience was fairly standard in that all participants walked miles through various types of vegetative landscapes, navigating a variety of obstacles, like muddy areas and thorny undergrowth, in the process. Participants faced the challenges of staying together during surveying different types of conditions, identifying artifacts as opposed to non-artifacts, documenting finds thoroughly, and meeting goals of survey coverage. On the other hand, weather was very fair (50 to 75° F and no precipitation) during fieldwork, and the project location was typically very flat. These mild aspects of

the experience would stand in contrast to real working conditions in field archaeology, which are, at least in the local area, often much more challenging.

The crew leaders and I did not attempt to provide an overview of all field archaeology, but instead strove to introduce the public volunteers to archaeology through surface survey, one of many possible mediums. Further exploration and assessment of community archaeology in a variety of contexts is a crucial step in continuing to develop an understanding of its impacts on the people who take part. The fieldwork in my project was limited to specific types of surface survey in a specific geographical setting – and the experience for both the public and the archaeologists helping to guide fieldwork duties would likely vary significantly given different field conditions and settings, or if fieldwork focused on excavation, shovel survey, structure mapping, preservation, or any one of numerous other potentialities.

Interviews

I conducted semi-structured interviews before and after archaeological fieldwork with all fieldwork participants (n=22; 16 public volunteers + 6 professional archaeologists). In following with Schensul and LeCompte's (2013) discussion of semi-structured interview methods, I devised a set of interview questions for each group of respondents in advance (Appendices A, B, C, and D) and asked a variety of unplanned follow-up and clarifying questions throughout the interviews. I collected some basic demographic data (age, gender, and education level) in all interview portions of this project (see Table 1 for Sauvie Island community archaeology project participant demographics). I did not collect any data on income or ethnicity. Minimum age for all participants was 18. These interviews ranged in length between 15 and 75 minutes, and

all were recorded with a portable digital recorder. In these interviews, I tried to gather information about how the experience affected the public volunteers' attitudes, perceptions and understandings of archaeology – and the archaeologists' attitudes, perceptions and understandings of the public and working with them. I also attempted to discover what both “sides” gained from the experience, or areas where gains fell short of their potential. I refer to the six archaeologists who took part in the community archaeology project as “field-participant archaeologists” throughout.

Table 1. Demographic Overview: Fieldwork Participants

Sample	Age	Gender	Education Level
Public volunteers (n=16)	Mean = 41.9 Median = 36.5 Range = 22-69	11 Females 5 Males	University = 13 Technical/Vocational/Post-Secondary = 1 High School or Less = 2
Field-participant archaeologists (n=6)	Mean= 29 Median= 26 Range= 23-48	4 Females 2 Males	University = 6

2.3 Interviews of Professional Archaeologists

I conducted semi-structured interviews with 15 professional archaeologists who work in, or have strong professional ties to, the Portland area (referred to throughout as “non-field-participant archaeologist”). I developed a wholly different set of questions for these interviews (Appendix E) which followed the same semi-structured format as described above. These interviews generally lasted between 40 and 60 minutes.

Recordation of these interviews consisted of either an audio recording made on a portable

digital device, or handwritten notes, depending on the desire of the interviewee. In these interviews, I used a range of questions to explore, from various angles, archaeologists' thoughts and feelings about their past experiences working with the public. This was meant to provide a more robust baseline of understanding thoughts, feelings, and perceptions – in this case those of the local professional archaeologist community.

Several criteria guided the selection of the 15 local professional archaeologist interviewees who were not involved in Sauvie Island fieldwork. First, these respondents were not employed or enrolled at, nor recent graduates of, Portland State. For this sample of interviewees, I wanted to focus on speaking to archaeologists beyond my close personal and academic network at Portland State, with the intention of avoiding conceptual or data biases. Second, I aimed for as equal a spread as possible among interviewees of different ages, genders, experience level with community archaeology, education level, and types of employment (i.e. agency, private, tribe, or university). If not already known, I assessed these variables by asking potential interviewees about them during the interviews.

My final sample was fairly diverse and consisted of eight male and seven female interviewees. Five interviewees had less than 10 years of professional archaeological experience, and the other ten interviewees had more than 10 years of experience. Six of the archaeologists worked for private companies in cultural resource management (CRM), four worked for agencies, two worked for tribes, one worked for a college, one worked for a museum, and one was a highly trained amateur archaeologist with extensive volunteer experience on professional archaeological projects.

2.4 Baseline Survey of the Public

I conducted this survey (Appendix F) in order to establish a baseline of knowledge about how a selected sample of the Portland area public understands and views archaeology, and to some degree, related concepts like engaging with the past and science in general. Survey questions 1, 2, and 5 are intended to directly explore respondents' knowledge level concerning archaeology. In order to identify existing levels of participatory involvement by the local public, Question 3 asks respondents if they have participated in archaeological work in a field or laboratory before. Question 4 explores interest level in such participation. Questions 6 through 10 explore respondents' attitudes towards publicly funded archaeological preservation, the importance of archaeology and science to society, and the importance of the past – and different ways of studying it – on a personal level. Question 11 asks respondents about what they think they would learn from doing archaeological work, and Question 12 prompts respondents to suggest subjects or projects for local archaeologists to focus on. On the surface, these last two questions directly explore respondents' hypothetical expectations concerning the experience of doing archaeology, and their ability or willingness to have a say in the direction of local archaeological work. At the same time, the open-ended nature of both questions also opens up the possibility of indirectly bringing to light aspects of the respondents' knowledge of, interest in, and enthusiasm for engaging with archaeology that would not be conveyed in responses to the other questions.

I took three of the survey questions (Questions 1, 6 and 7) directly from a previously completed, major survey of the public (Ramos and Duganne 2000). By posing these questions to a different sample population, approximately 16 years after Ramos and

Duganne’s study, I can potentially extend the meaningfulness or applicability of certain aspects of my data, as well as address the question of how spatially and temporally localized the results of my data are.

I designed the baseline survey of the public along the lines of Schensul and LeCompte’s (2013) notion of a stratified random sample. The survey incorporates three types of strata: 1) English speaking adults in the Portland area, 2) survey in the four principal cities of the Portland area, and 3) all surveys being conducted at one of two “location types.” The first location type consisted of general gathering areas, comprised almost entirely by various shopping areas, and the second location type consisted of areas with a strong relation to history (Tables 2 & 3). Each location type was expected to yield different cross sections of the Portland area population. General gathering areas were chosen and continuously evaluated with the intention of finding the most representatively diverse sample of the local population possible (see paragraph below for more discussion). This evaluation was somewhat informal and involved comparing the demographic data I was collecting from survey respondents (age, gender, and education level – framed in the same language used by Pokotylo and Guppy in their 1999 survey of the Canadian public) to recent local census data (Table 4). I did not collect any data on income or ethnicity.

Unfortunately, utilizing Pokotylo and Guppy’s (1999) categorization of education level, and comparing these categories to the federal census in an effort to seek a representative sample, proved problematic. In my survey, I included anyone of any age who reported having any university education (even, for example, one university course) in the “University” category (87% of all respondents). The most recent available federal

census data reports education level differently, measuring percentage of individuals 25 or older with a bachelor's degree or higher – 47% of Portland residents (U.S. Census Bureau 2015). I can say anecdotally that many of the survey respondents I talked to who fell under the “University” category told me that they never completed a degree, for example they were currently in university or had only completed a few university classes at some time in the past. However, this information came as an aside during the survey process, and I did not formally record any information beyond which of the three categories a respondent fell in. The percentage of my survey respondents with at least a high school education (90.9 %) matches well with the Portland census data (91% of people 25 or older had a high school degree or higher). Despite this, however, I have no reliable data to either support or reject the notion that my sample is representative in terms of education level. Furthermore, I conducted almost half (45.6%) of my overall surveys at history-related locations with no intention of seeking a representatively diverse sample there – I simply surveyed anyone I could who was leaving these places (see end of Section 2.4). For these reasons, as well as my limited sample size of overall survey respondents, I make no claim in this thesis that my overall survey sample is representative of the Portland area or any of its constituent cities. However, throughout the process of surveying in the general location types, I still sought as diverse a sample as possible by avoiding survey areas that, during preliminary survey, appeared to be clustering certain types of demographics. For example, various WinCo and Fred Meyer locations were avoided in favor of the Beaverton and Hillsboro farmer's markets, where, after preliminary survey, I encountered a more diverse respondent pool in terms of age and education.

I originally included the second, history-related location type in order to explore whether people visiting these types of places responded to the survey questions differently than those in the more random general location sample. Ultimately, however, I did not carry out this comparison of location types for this thesis, and generally limited the survey analysis I present in this thesis (see Section 2.5 for explanation)

Table 2. Number of Survey Responses by Location

Specific Survey Location (City)	Location Type	# Completed Surveys
Oregon Historical Society Museum (Portland)	History-related	75
Fred Meyer, SE Hawthorne Blvd. (Portland)	General	12
Safeway, NW Lovejoy St. (Portland)	General	10
Safeway, SW Jefferson St. (Portland)	General	5
Fred Meyer, NW 20 th Pl. (Portland)	General	1
Beaverton Farmer's Market, SW Hall Blvd. (Beaverton)	General	44
Beaverton Historical Society, SW Hall Blvd. (Beaverton)	History-related	5
Beaverton Transit Center MAX Station (Beaverton)	General	1
Hillsboro Farmer's Market Downtown, Main St. (Hillsboro)	General	43
WinCo Foods, SW Oak St. (Hillsboro)	General	7
Fort Vancouver National Historic Site (Vancouver)	History-related	36
Safeway, Main St. (Vancouver)	General	15

Table 3. Number of Completed Surveys by Location

Grouping	# Completed Surveys
Portland locations	103
Beaverton locations	50
Hillsboro locations	50
Vancouver locations	51
History-related locations	116
General locations	138
All surveys	254

Table 4. Demographic Overview: Public Survey Respondents (n= 254)

Age	Gender	Education Level
Mean = 43	Females = 133 (52.4 %)	University = 221 (87 %)
Median = 39	Males = 120 (47.2 %)	Technical/Vocational/
Range = 18-82	No answer = 1 (0.4 %)	Post-Secondary = 10 (3.9 %)
		High School or Less = 23 (9.1 %)

The final version of the survey consisted of 12 questions and normally took between 4 and 7 minutes to administer (see Appendix G for a summary of survey results). After surveying 38 respondents, I added two questions, Questions 6 and 12, for the final 216 survey respondents. These added questions were inspired by some of the responses and suggestions I received while conducting my interviews with local archaeologists. The survey included a mix of open-ended, multiple choice, and Likert scale questions. I accepted and logged multiple responses per question on open-ended questions if a respondent gave multiple answers. For example, for the survey's first question "What do you think archaeologists do in their work?" if a respondent answered "Dig" and "Find old bones," both answers were logged. Respondents were not provided with a definition of archaeology before answering the first two questions. In only a handful of instances did

survey respondents ask for a definition of archaeology, and in these cases, I provided a definition of archaeology after the survey was completed.

I recruited and trained four research assistants to help administer this survey. Each assistant had some background and/or training in anthropology, and I observed each in the field to ensure overall quality of performance as well as compliance with project research protocols. During survey, we attempted to avoid any bias in selecting individuals to survey beyond ensuring that potential respondents were aged 18 or older and willing to participate. At the history-related locations, survey was conducted at the main entrance/exit with visitors (i.e. not employees) who were *leaving the location after visiting*. At all other locations, survey was conducted near a main doorway or thoroughfare with anyone aged 18 or older entering or exiting the location. Studies from various fields (e.g. Erwin and Wheelright 2002) have shown that monetary incentives improve survey response rates. With this in mind, my assistants and I offered all potential survey respondents \$5 cash to take the survey.

2.5 Survey & Interview Data Analysis

I collected data in the form of written survey responses (filled out by the surveyor), audio recordings, written interview notes, and full transcriptions of all semi-structured interviews. I took an inductive approach to analysis, examining the interview data for emergent themes throughout the analysis process and continuously reassessed the data in terms of these themes (Bernard 2011). My analysis was also deductive to a certain extent, as I designed portions of my interviews, survey, and community archaeology

project – and asked relevant follow up questions during interviews – in order to elicit information that pertained to my hypotheses (see Section 1.3).

Textual qualitative data from my semi-structured interviews were coded (e.g. “Place” or “Personal Fulfillment”), queried, and organized with the aid of ATLAS.ti and Microsoft Word software. I created a codebook to log and depict the structure of my coding work (see Section 3.1). Exemplary quotations were pulled from collected data and highlighted during analysis (LeCompte and Schensul 2013:278). I also ran a code-co-occurrence query on all interview data with ATLAS.ti. This code co-occurrence query was intended to reveal relationships among codes, in other words sections of interview transcripts where two or more primary themes are being discussed at once. For example, in my analysis, if an archaeologist was discussing barriers to community archaeology and began to tell a story from a CRM context, this would have resulted in a code co-occurrence with “CRM” and “Barriers.” This process was of particular use in showing relationships among themes that were not immediately apparent during data collection or preliminary analysis.

I provide some basic context with each exemplary quotation. For archaeologist interviewees, in the interest of retaining anonymity, I only provide their approximate age, current or most recent type of employment (tribe, agency, museum, academic, or CRM), and level of experience interacting with the public in professional or research settings. I break this level of experience with the public (EP) into three possible broad categories based on the interviewee’s own descriptions of their work experience:

- Low EP: Participation in one or fewer public-oriented projects – interaction otherwise mostly limited to sporadic, unplanned encounters with the public during fieldwork
- High EP: Participation in more than one public-oriented project, and professional duties sometimes requiring public engagement
- Very High EP: Over a decade of experience carrying out professional duties consistently requiring public engagement

For the public volunteer interviewees, I only provide age and gender as contextual information for each volunteer.

My analysis of the survey data was limited to a descriptive sketch comprised of tallying quantitative data and basic tallying and categorizing of qualitative data. This categorizing simply involved grouping together verbatim survey responses that meant essentially the same thing under umbrella terms or phrases – for example, responses like “Indians,” “local tribes,” “First Nations,” and “indigenous peoples” were grouped into the answer category “Native Americans” when analyzing the second question on the survey.

The only additional analyses that I discuss in this thesis consisted of basic examination of several of the open ended survey questions in order to see how many survey responses did or did not contain certain elements or characteristics. For example, I examine responses to Question 2 to see how many responses included the answer category “Native Americans” (see Section 3.2).

The potential for further, in-depth quantitative analyses abounds with the survey data I collected. For example, it would be meaningful research to explore possible correlations between some of the demographic information I collected and interest level

in archaeology or attitude towards science. Or to explore differences between location types, or differences among various groups within the sample, for example respondents who state that they have done archaeology before and respondents who state that they have not. Furthermore, surveys of the public concerning knowledge and attitudes related to archaeology are few, and what work has been done on this issue is, to some degree, becoming outdated. Therefore, any new, contemporary survey data on this subject is of potentially great value. However, the primary purpose of my survey in terms of this thesis is to provide supporting information for my interview-based examination of the effectiveness of a community archaeology project and its critical evaluation. Detailed explorations of other important aspects of my survey data within more general, less directly relevant contexts, are better left for a subsequent undertaking, and I omit them from this thesis. Instead I include only the most relevant portions of the survey results in the text of this thesis. General results from the survey not highlighted in this thesis' text are presented in Appendices H, I, J, K, and L.

Taken together and “triangulated” (LeCompte and Schensul 2013:80), the above analytical methods allowed for an examination of how often certain themes appeared in certain places within the data, and the relationships among variables important to answering my research questions.

2.6 Ethical Considerations for Data Collection/Analysis

Some archaeologists argue that the degree to which community archaeology projects achieve inclusiveness is a matter of ethics (Richardson and Almansa-Sánchez 2015). In other words, the more a project involves different people (not just

archaeologists) – and the more agency all participants have – the more ethical it is. Following this line of thinking, I strove to make sure participants in this project had agency in several primary ways. First, I actively sought suggestions for this and future projects from all participants throughout the course of data collection. Public volunteers taking part in the community archaeology project contributed substantially throughout the entire process of surveying and documenting archaeological materials and features. Archaeologist interviewees not involved in fieldwork also contributed reflexively throughout the course of the interviewing process by suggesting new questions and helping to guide the course of my mixed methods inquiry towards new ways of asking and addressing my research questions. Even the public survey respondents were asked about their ideas for worthwhile future archaeology projects, and these conversations helped mold the final outcomes of this project. In an additional effort to be accountable to the communities with whom I worked, I have sent a draft of this thesis to everyone involved in the project, asking for their suggestions, comments, and revisions. Lastly, I submitted my project design to Portland State University’s Institutional Review Board committee for review and approval, and utilized both written (for Sauvie Island fieldwork participants) and verbal (for non-field-participant archaeologist interviewees and public survey respondents) consent processes (see Appendices M and N). While these steps are integral to many anthropological, sociological, and other types of research projects, I know of no published ethnographic or mixed methods research on archaeological topics that explicitly mentions completing or otherwise including these important ethics-related processes.

Beyond the participant communities, I made contact prior to fieldwork with potentially interested agencies and other groups to ensure that the community archaeology portion of the project was not going to conflict with anyone's wishes. Also, with conventional ethics concerning the protection of archaeological heritage in mind, I distributed a copy of the Society for American Archaeology's (1996) "Principles of Archaeological Ethics" to all of the archaeology volunteers, and I repeatedly made clear the importance of preserving the record and conducting archaeological fieldwork with care.

Turning to the data itself – the baseline survey was completely anonymous, and all interview data was confidential. All identifiers linking individuals to confidential data were destroyed shortly after data collection was complete, and all data and information related to this project was kept in a secure location. All references to the data (e.g. exemplary quotations) in this thesis are completely anonymous.

2.7 The Community and Community Voices

Continuing the line of thinking from the above section on ethics, and in following with some criticisms of community archaeologists for allegedly not making good on their claims of "multi-vocality" or incorporating community voices (e.g. La Salle 2010), I strove to be very clear about what contributions potential participants would be making to my project. This offered community participants the best possible chance to contribute as much as possible to the project. For example, I made sure all potential public Sauvie Island volunteers were aware that their thoughts, feelings, and opinions would be taken into account via interviews, their work in the field and ideas would

contribute to an archaeological survey-related research endeavor, and that they would be able to read a draft of the write-up and make edits and suggestions.

My project – in the interest of time and to keep the scale of the project manageable – was not designed to be a fully integrated, level partnership with the public where the public is involved or in charge of every level of project design and implementation. But the public’s role was significant throughout, and clearly defined. By seeking diverse samples (i.e. selecting interviewees and volunteers with different demographics and experience levels, and surveying in a variety of locations), I tried to take a range of perspectives into account, rather than those of just one segment of the community. For instance, I did not want to just have a group of like-minded retirees for public volunteers on Sauvie Island, and I did not want to only interview a group of similar CRM archaeologists for my professional archaeology interviewee sample (see Sections 2.2 and 2.3). This was important to my purposes because I attempted to assess the general impact, outcomes, and successes/failures of a community archaeology project in a way that would be both scientific and broadly applicable. While some community anthropology and archaeology projects are in fact intended to focus more narrowly on one portion of a community or a particular community need, I believe that taking the kind of steps I outline above is crucial to the success of broader, descriptive assessments of archaeological work and/or experiences.

Chapter 3: Results and Discussion

3.1 Identifying Important Themes

The following chapter presents results from analysis of my survey and interview data, grouped into three main thematic categories: 1) attitudes, perceptions and understandings, 2) the relevance of archaeology to the public, and 3) a reflexive examination of community archaeology. After coding, organizing, and analyzing my data, it became apparent to me that among various important patterns and meanings present in my data, these three thematic categories were the most essential to addressing my hypotheses and research goals. I also chose them as best fit groupings in which to explore and highlight various ideas, trends, and topics present in the data. Many of these important findings originate from deductive interview/survey questions and analysis based directly on my hypotheses – for example, exploring what the public knows about archaeology and what was gained by archaeological fieldwork participants. Other themes were of a more inductive origin, emerging in the course of analysis from the data, from patterns in the codes (Tables 5 and 6), and from comparisons among different sets of interview and survey data.

Table 5. Final Code List and Tally of Code Occurrences (from ALL Semi-Structured Interviews)

Broader Categorical Codes (# of Occurrences)	Specific Codes Included (# of Occurrences)
Systematic/scientific archaeology (59)	Research for research's sake (6); Science elevated (19); Survey (2); Technical Side of Archaeology (25); Tedious Archaeology (7)
Barriers to Community Archaeology (98)	Avoiding the public (7); Ignorant public (26); Funding (16); Fearful public (9); Looters (26); Restrictions on Public Access (14)
Outreach & Education (55)	Children (16); Dumbing down (4); Personality (3); Recruitment (8); Tying to Present (24)
Positives re: Community Archaeology (65)	Communal/social aspect (13); Hands On (14); Knowledgeable public (23); Personal fulfillment (15)
Assessment (55)	Ethnography (6); Public response (27); Who is this for? (22)
Public Perceptions/Perspectives (108)	Intrinsic value of history (12); Digging (13); Public response (27); Public support/interest (31); Which Public? (22); Whose past? (3)
Social Issues (71)	Development/housing (6); Indigenous (7); Social contexts (16); Transplants (14); Volunteers (28)
CRM (14)	-
Place (80)	Outdoors (17); Portland (20); Transplant experience (2); Urban vs. Rural (7)

Table 6. All Interviews Code Co-Occurrence Analysis via ATLAS.ti: Top 10 Results

Code Co-Occurrence	Count
Barriers & Funding	13
Barriers & Outreach/Education	9
Place & Transplants	9
CRM & Barriers	8
Place & Who is this for?	6
Barriers & Science Elevated	6
Barriers & Technical Side of Archaeology	6
Hands On & Outreach/Education	6
Barriers & Restricted Public Access	5
Barriers & Social Contexts	5

3.2 Theme 1: Attitudes, Perceptions and Understandings

The Idea of an Uninformed Public

While no archaeologist I interviewed mentioned or in any way referenced the prior studies of public perceptions of archaeology that I discuss in the introduction (Section 1.4), a majority of archaeologists I interviewed directly or indirectly described the public as generally uninformed about archaeology – or at least lacking awareness of some the field’s most important aspects. In many cases, archaeologists brought up the idea that many members of the public were unaware that archaeology was even done near where they lived, or that archaeologists studied many different time periods, or, in several cases, were unaware that Indigenous peoples even occupied their local area in the past. In the context of interaction with the public in professional settings, this lack of awareness made the act of working with the public seem more difficult to some archaeologists.

Many archaeologists with varying levels of experience with the public stated that people often interact with them, in various settings and contexts, in a way that expresses strong interest in, but also very little understanding of, what they do as archaeologists.

Of the various public misconceptions about archaeology that my archaeologist interviewees discuss, by far the two most frequently mentioned were 1) that archaeologists study dinosaurs, and 2) that archaeological work consists solely or primarily of digging.

Non-Field-Participant Archaeologist (Late 20's; CRM; Low EP):
Yeah like half the people I tell I am an archaeologist ask me about dinosaurs, so then we talk about dinosaurs.

The above interviewee's interactions with the public in professional settings were rare, and somewhat informal and spontaneous – mostly chance encounters with local residents during fieldwork. However, another interviewee with many years of focused, professional public outreach and community archaeology experience portrayed a very similar feeling:

Non-Field-Participant Archaeologist (Late 50's; Agency, Very High EP): When you're out doing a project for a long time period with the public coming and visiting, you get tired of answering the same questions over and over again. It amazes me how many people think archaeologists are doing paleontology, looking for dinosaur bones, not that we're looking for cultural remains of what people did. So that's something that has to get explained over and over again which I think is kind of interesting.

Thus, many of the archaeologists I spoke with for this project, regardless of level of experience working with the public, were in agreement that the public appears to be ignorant about what archaeologists do, and a few archaeologists even identified this as a barrier to successful public interaction and/or involvement.

However, the results of my survey in the Portland area strongly suggest that the public actually often demonstrates *partial* understandings of archaeology rather than being generally uninformed about what archaeologists do. The survey’s first two questions were basic, open-ended knowledge questions concerning the nature of archaeology and what archaeologists study. Question 1 (see Appendix H for full results table) asked “What do you think archaeologists do in their work?” By far the most frequent response was “Dig” (39.8 %). The next most common response was “Gather information about the past/history” (25.2 %), and other common responses included “Research” (13.8 %), “Study/find artifacts” (13.8 %), “Work at sites/in the field” (10.2 %), and “Study old/ancient cities/civilizations” (10.2 %) (Figure 4).

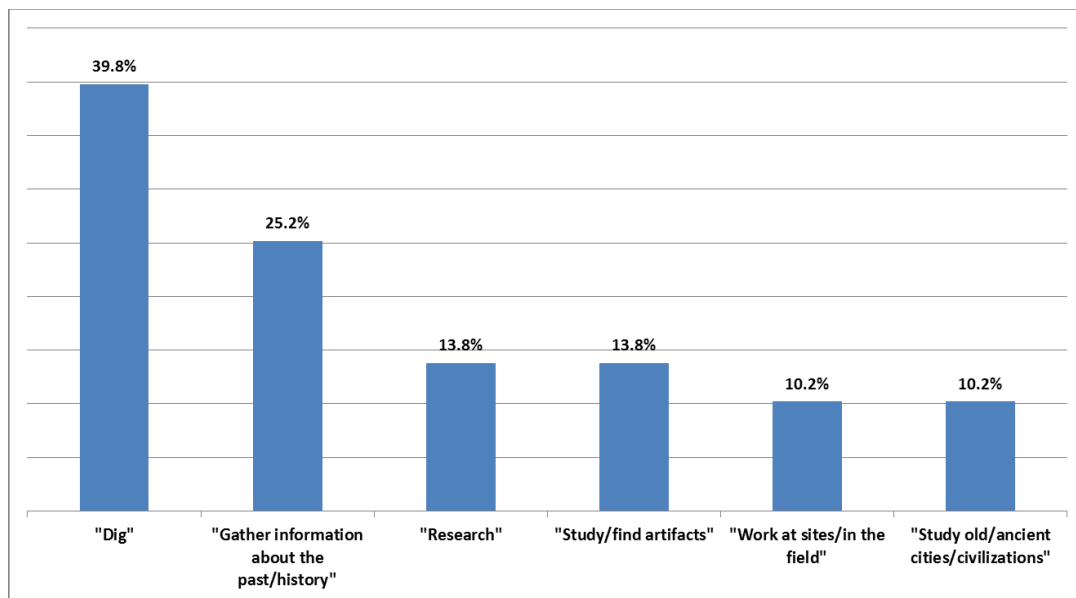


Figure 4 The six most common answers to Survey Question 1: “What do you think archaeologists do in their work?” by percentage of survey respondents

The six most common answers to this question (Figure 4) all accurately describe activities most archaeologists do frequently in their work. Taken alone, this result is

somewhat surprising and contradicts the assertion represented by my hypothesis that the public generally misunderstands what we do as archaeologists. However, when respondents' final overall answers to the question (including all of the responses given if there were more than one response per respondent) are examined, a certain amount of misunderstanding about what archaeologists do becomes apparent. For example, one survey respondent answered "Gather information about the past/history" and "Dig dinosaur bones." This combination of responses is a good representation of a common pattern of contradictory answers that reflect a partial understanding. Only 98 out of 254 survey respondents (38.6 %) provided answers that did not include a reference to something archaeologists do not normally do in their work (e.g. study dinosaurs) to Question 1. Only 18 respondents (7%) provided a response that clearly demonstrated an understanding that archaeologists generally do something along the lines of studying the material human past in order to help understand past human lives and/or behaviors.

This description of Question 1's responses is not meant to suggest that I generally expected, or explicitly asked for, the level of detail present in a "textbook" definition of archaeology. I simply make the assumption – and I would argue, based on their analyses of the same question, that Ramos and Duganne (2000) likely make the same assumption – that a respondent's answer to a basic question like this would be more detailed and more consistent with a "textbook" definition of archaeology the more understanding of archaeology the respondent has. However, analysis of open ended questions like these is difficult because one can never be completely sure a respondent is understanding a question the same way it is intended by the surveyor to be understood. Furthermore, the way I discuss archaeology with my archaeological colleagues, and likewise the way I

expect them to perceive of and discuss archaeology, is likely to be different than the way the public generally discusses archaeology. Exploring these differences is difficult, but of utmost importance to addressing research questions like mine.

As in my survey, mention of digging and/or excavating featured very prominently in Ramos and Duganne's (2000) results, although a direct numerical comparison is impossible because they broke this general response up into different categories of digging. Also, the most common answer for this question in their survey was "analyzing and researching the past to discover and learn what life/past civilizations were like" (Ramos and Duganne 2000:12), which comprised 25 percent of their responses to this question. This answer is closely analogous to the second most common response to my Question 1, "Gather information about the past/history," which comprised a very similar 25.2 percent of responses. Digging was also one of the most common answers to similar questions asked in two large surveys of the general Canadian populace (Pokotylo and Guppy 1999; Pokotylo 2002). Taken together, these common findings among surveys of the public *might* support what many of the archaeologists I interviewed mentioned –that members of the public they encounter often have the misconception that archaeology is limited to digging. However, further research is necessary to understand whether or not this seemingly ubiquitous correlation of archaeology to digging in survey responses means that non-archaeologists actually think archaeologists *exclusively* dig in their work (a misconception) – or if digging is simply a cluster of responses arising from a common, "top-of-the-mind" word association.

Question 2 asked "What are the oldest things archaeologists might study in the Portland area?" – and both actual things and dates/ages were accepted as answers (Table

5). The most common answer, by quite a wide margin, was “Native Americans/Indians” (40.6 %). Again, while this answer was correct in itself, many respondents who mentioned Native Americans/Indians also gave inaccurate answers in addition (e.g. “Fossils”). Only 95 out of 254 respondents (37.4 %) provided final, complete answers that did not include a reference to a thing or date unrelated to the oldest things archaeologists might study in the local Portland area.

Table 7. Survey Question 2 Results: “What do you think are the oldest things archaeologists might study in the Portland area ?” (n=254)

Categorized Response	n (%)
Native Americans/Indians	103 (40.6 %)
Animals/plants	31 (12.2 %)
Fossils	29 (11.4 %)
Dinosaurs	22 (8.7 %)
Rocks	15 (5.9 %)
Bones	14 (5.5 %)
Historic buildings/structures	12 (4.7 %)
9 to 15 kya/ Ice Age	11 (4.3 %)
Early Europeans/Euro-American	10 (3.9 %)
Volcanoes	8 (3.5 %)
River	7 (3.1 %)
500 years old	5 (2 %)
Geology	5 (2 %)
Don't know/nonsensical answer; Glaciers; Soil; 1.5 to 2 kya; Old things; Nature; Tunnels; Millions of years old; 1800's; 1600's; Missoula Flood; Shipwrecks; Landforms; Immigrants; Pottery; 40 kya; 200 kya; Paleolithic; Graves; Mexican civilizations; Caves	< 5 (< 2 %)

The results of both Questions 1 and 2 from my survey support the assertion presented by several other authors of large public surveys (Pokotylo and Guppy 1999; Ramos and Duganne 2000) that the public has partial knowledge concerning archaeology, but is not generally uninformed. Interestingly, however, none of the archaeologists I interviewed specifically discussed this concept of a partially accurate perception or understanding of archaeology. Discussion of poor public understanding of archaeology was always framed around the idea that the public is essentially *completely* uninformed – despite there being no direct questions or prompts from me as interviewer to narrow the focus in this way. The idea that many members of the public are completely uninformed about archaeology (which was one of my basic hypotheses going into this project), stands in substantial contrast to the results of my analysis. For example, the vast majority of answers to my question asking about what archaeologists do were accurate in and of themselves, and over 40 percent of survey respondents were aware that Native Americans were at least one of the oldest things archaeologists study in the Portland area. Both of these results contradicted my expectations in terms of public understanding of archaeology.

I think that many archaeologists would be surprised at another result from my first two survey questions: only 7 of 254 respondents (2.8 %) mentioned dinosaurs in response to Question 1, and only 22 of 254 respondents (8.7 %) mentioned dinosaurs in response to Question 2. In contrast, one third of the archaeologists I interviewed mentioned the perceived public misconception that archaeologists study dinosaurs. While this result alone does not necessarily mean archaeologists are wrong about what the public thinks in general, it is one of several examples that support my hypothesis that archaeologists

sometimes have inaccurate perceptions of how the public views and understands archaeology.

In further contradiction of my hypothesis that the public is *generally* misinformed or ignorant about archaeology – echoed by many of the archaeologists I interviewed – some archaeologist interviewees instead discussed the public’s general knowledgeability and ability to learn about, and contribute to, archaeology. Often, they discussed the public as being a valuable resource to archaeologists because people tend to know their local landscapes, and in some cases local cultural resources, intimately.

Non-Field Participant Archaeologist (Mid 40’s; Tribe; High EP): But it is an example of how the public does engage with archaeologists with positive results. Whenever I’m here in the states I always try to talk to the residents, whoever owns property, neighbors, because they know it better than I do. I’m just some guy who showed up to dig holes. And they always go why are you looking there, everybody knows you don’t look there, you look down here!

This statement focuses on the context of sporadic or random interaction with the public as opposed to purposeful public involvement through, for example, community archaeology. Some archaeologists who had done community or volunteer-based archaeology projects, however, also praised the general ability of members of the public to come into a project, contribute, and work productively as part of a team. One archaeologist even noted that some public volunteers he has worked with demonstrated greater abilities to do simple field tasks than some professional archaeologists he has worked with. Similarly, while a few field-participant archaeologists expressed various types of doubts about the public volunteers before fieldwork on Sauvie Island (discussed further in the next section), every field-participant archaeologist viewed the volunteers’ performance quite favorably following the field project.

Drawing on both the Sauvie Island community archaeology project and other past experiences, the archaeologists I interviewed mentioned two other main types of, in their view, beneficial results from public involvement in archaeology. First, three non-field participant archaeologists mentioned the effective and successful employment of public volunteers as site monitors and stewards, helping to protect sensitive sites from potential looters and teach other members of the public about archaeology. This last concept relates to a theme mentioned by these and several other, different interviewees: that public involvement helps spread archaeological knowledge, not just from archaeologist to non-archaeologist, but from non-archaeologist to other non-archaeologists.

Secondly, one field-participant archaeologist talked at some length about how having members of the public out helping with fieldwork on Sauvie Island may have improved the actual archaeological work being done. In this instance, the interviewee is referring to the idea that in the course of sharing and teaching archaeology, the public participants improved the archaeologists' understanding of their own field by inspiring reflexive, critical examination.

Field-Participant Archaeologist (Mid 20's; Agency; Low EP): Having this experience definitely gave me the idea that involving the public is important, and it's good scientifically because it exposes where you've been making assumptions and it sort of helps you figure out or reassess whether those are good assumptions to make in terms of how you identify sites or how you classify artifacts, things like that. I think it would be important to continue involving people [from the public].

In all of the above examples concerning the ability of members of the public to *positively* contribute to archaeological work, one common theme, related to the idea of an uninformed public, is prevalent. This is that none of the discussed benefits or changes in how archaeologists view(ed) the public following public participation in archaeology

seem to be dependent on the public having substantial, pre-existing knowledge of archaeology before taking part in conducting archaeological work. It is something of a truism to state that a public archaeologist or community archaeologist would have an easier (albeit irrelevant) job if every non-archaeologist was an expert in archaeology, and it seems clear from the available data that this is not the case; the public's understandings of the nature of archaeology still demonstrate substantial inaccuracies. If this misunderstanding truly stands as a serious barrier to community archaeology, however, it remains distinctly unclear, based on my interview data and analysis of the Sauvie Island community archaeology project participants' experiences, exactly why or how that could be the case.

I asked all the public volunteer participants in my Sauvie Island field project to define "archaeology" at the beginning of their pre-field interviews. All but one (15 out of 16) gave complete and accurate definitions, indicating that the volunteers coming into this project may have had a greater understanding of what archaeology is than the average respondent in my Portland area survey. Interestingly, while almost all the public volunteers had given fairly accurate responses before the field project, many volunteers added new details or modifications to their answer which often reflected something they had learned or observed during the field experience.

Public Volunteer (Female, Age 57) before Sauvie Island fieldwork: I'd say it's sort of the study of older cultures to inference from the artifacts that get left behind.

Same Public Volunteer after Sauvie Island fieldwork: OK I don't know what I said the first time but I still think it might be the practice of discovering, maybe I'd throw in words like cataloging or documenting artifacts that were found in order to interpret aspects of past cultures.

In the above example, and in many of the public volunteers' interviews, it appears that the volunteer is conveying new knowledge and understanding of archaeology by not only adding extra detail and substance, but also new vocabulary, to their definition of archaeology.

I suggested previously, according to the anecdotes from my archaeologists interviewees' past experiences, that many of the benefits the public were able to bring to past archaeological endeavors seem by nature to have occurred irrespective of public participants' understandings about archaeology coming into a project. However, the implications of this notion become somewhat muddled if the pattern seen in my Sauvie Island project –of volunteers starting off with a greater than average understanding of archaeology – is generally the case. In other words, even if participation in archaeology does increase a participant's understanding of the field, it's difficult to say what role non-archaeologists' pre-existing knowledge of archaeology plays in their experience participating in archaeology if most volunteers or potential volunteers already know more than the average person about archaeology. They are participating because they are interested, and know what they are interested in.

Archaeologists' Fear of the Public

Some archaeologists see the public as a potential source of looting and destruction of archaeological remains. For example Proulx (2013) gathered survey data from archaeologists about their perceptions and experiences concerning looting, and found the issue of looting to be of substantial worldwide concern to archaeologists of all types.

Unfortunately, in Proulx's (2013) study the idea that the public might loot a site was essentially assumed throughout, and respondents' broader perceptions of the public were not explored. Turning to community archaeology specifically, some community archaeologists have expressed concern about increased public involvement with archaeological materials, not just because of potential consequences involving looting (e.g. Richardson and Almansa-Sánchez 2015:204), but also because of a fear that people without intensive training may harm archaeological materials in the process of participating in certain fieldwork activities (Shai and Uziel 2016).

One particularly pervasive pattern among the archaeologists' interviews was archaeologists' fear of certain types of public involvement with archaeological materials. The most common incarnation of this fear was the perception of members of the public as potential looters or collectors, conveyed at least once by 17 of 21 professional archaeologists interviewed (81 %). Often, this perception was expressed in terms of having to withhold information or responsibility from members of the public in order to prevent the collection of artifacts or looting of sites:

MP: Do you think it's a good or bad thing if the public knows more about what we do and why?

Non-Field-Participant Archaeologist (Mid-20's; Museum; High EP): I mean it obviously increases the risk of looting and we're going to have to keep a lot of the site locations secret still.

Several other non-field-participant archaeologists expressed similar concerns about community archaeology contributing to a pre-existing pattern of looting by making more site location information available. One of the field-participant archaeologist

interviewees also stated having similar concerns going into the Sauvie Island fieldwork.

For example:

Field-Participant Archaeologist Interviewee (Mid-20's; CRM; Low EP): I was expecting more people to be detectorists or someone wanting to know what important stuff there was to find or how much it would cost to get it.

Another manifestation of this general fear of public involvement with archaeological materials was the idea that archaeology is too complex, technical, and/or esoteric for the public to play a significant role in without potentially harming archaeological materials or decreasing the quality of the archaeological work. This concept appeared in my interviews with archaeologists in two general ways. First, half of the field-participant archaeologists expressed concerns in their pre-field interview about whether or not the public would be able to comprehend instruction, carry out tasks, and work productively towards the pre-defined archaeological research objectives. Secondly, several archaeologists not involved with the fieldwork expressed similar concerns about the implementation of community archaeology without significant oversight of the public by archaeologists.

Non-Field-Participant Archaeologist (Mid-20's; Museum; High EP): Getting people involved is great... However, the idea of community-run archaeology with no real professional oversight, the idea that that's a possibility or that's good for the community, I think that's just not true. I think it might seem like it's a good idea at first because it will get people involved, but inevitably it's just going to lead to archaeology being watered down, or to the point where it's no longer a valid study.

This archaeologist appears to view community archaeology's goal of involving untrained members of the public in archaeological work as romantic or unrealistic,

implying that archaeological work usually achieves “validity” through diligent adherence to parameters that are above the understanding level of the average person. Another professional archaeologist, also with a high EP, discussed a similar concern in relation to archaeological excavation – a field method that is perhaps particularly relevant in this context because the act of excavation can be, by definition, irreversibly destructive:

Non-Field-Participant Archaeologist (Late 30’s; Agency; High EP): Both of my predecessors actually warned me against that because they’ve had some difficult experiences with people who have no experience with excavation and artifact and feature identification.

In a similar vein, one field-participant archaeologist expressed concern about the quality of the site documentation that was completed on one site that one crew encountered in the field during the Sauvie Island community archaeology project. However, this particular interviewee was, interestingly, quick to cast blame inwardly for the above perceived shortcomings:

Field-Participant Archaeologist (Mid 20’s; Agency; Low EP): The issues we ran into I took responsibility for. Just being the knowledgeable leader of the group, I felt like when someone did fall behind in the group that it was because I hadn’t set people’s expectations properly or given them the right tools to stay together. It was frustrating, especially with myself after that. In terms of recording the site, at that point it was tricky because I wasn’t sure exactly what kind of feedback to give people as we were doing it.

Given that the types of fears I discuss above about public involvement are also mentioned fairly frequently in the literature, it is apparent that such fears are quite common among archaeologists both within and beyond my sample. In some cases, these fears are framed in terms of ethical archaeological practice. For example, a number of archaeologists from both samples stated that while engaging in interactions with the

public, they consciously strive to adhere to, and convey, ethical notions about the preservation of heritage and responsible engagement with the archaeological record. For example, one non-field-participant archaeologist described a past volunteer project where members of the public who volunteered to be trained as archaeological site monitors were expressing great fascination in site areas that contained or were related to human burials. This interviewee had to repeatedly step in to remind these volunteers to not disturb burial areas, and that while these areas were very interesting, it is a serious violation of archaeological ethics and Indigenous rights to disturb them.

It is clear that many archaeologists expect the public – if they are to be gainfully involved in community archaeology – to demonstrate a high level of knowledge and technical ability, as well as concern for the preservation and accurate documentation of the archaeological record. However, it is important to note that in my interviews with archaeologists, the fear of the public’s potential to harm the archaeological process or archaeological materials was most often mentioned in an almost instinctual, top-of-mind fashion as one of several primary barriers to community archaeology with no clear indication of the fear’s origin or underlying meaning, and no specific examples of related, problematic past experiences. Instead, while I recognize that the looting of archaeological sites is a serious global problem (see Proulx 2013 for extensive examination of this issue), the fear generally comes across in my interviews more as something ingrained in an archaeologist’s training, or something present in the form of second-hand stories, than as something originating from independent experience and observation. Furthermore, mention of personal experiences involving potential looting or destruction from actual

community archaeology contexts are limited to just the one example mentioned above – wherein no actual destruction seems to have occurred.

Continuing with the theme of personal experience, one pattern observable across all the archaeologists' interviews is that the more experience working on actual community or volunteer archaeology projects an interviewee (at least claimed to have) had, A) the more likely they were to be positive about the ability of the public to successfully and productively participate in scientific archaeology work, and B) the less likely they were to express the types of fears over public involvement that I discussed in the previous section. Interviewees whose experience with the public was more limited to “everyday” type encounters with, for example landowners, clients, or non-archaeologist stakeholders, and/or limited to educational outreach activities, showed more negativity and reluctance towards the idea of expanded public involvement.

In following with this pattern, five out of the six field-participant archaeologists, when interviewed shortly after completing the community fieldwork on Sauvie Island for my thesis project, expressed exclusively positive views towards community archaeology and working with public volunteers. All *changes* in these six archaeologists' perspectives concerning the public volunteers following the fieldwork experience were positive; no field-participant archaeologist reported having new fears or additional fears about the public's involvement in archaeology after the experience.

Only one field-participant archaeologist expressed any fear at all about the public's involvement in the project after the fact – but, as discussed above, this concern (that site documentation was poorly conducted on one site identified during survey on Sauvie Island) was self-attributed to the interviewee's own perceived shortcomings.

Ultimately, none of the six field-participant archaeologists mentioned feeling that the public was responsible for any damage to the archaeological record of any type during the project.

More about Attitude(s)

Two of the published surveys of the public I refer to in this thesis (Hodder 1984; Pokotylo and Guppy 2002) mention the notion that the public at times expresses a skeptical attitude towards archaeology's value to modern human society. However, the great majority of these surveys' results suggests strongly positive attitudes towards archaeology in general, and indicates substantial public interest in archaeology and the preservation of cultural heritage. For example, one study (Pokotylo and Guppy 2002) found that over 90 percent of a large sample of Canadians had visited an archaeology-related museum, and over 40 percent had visited an actual archaeological site.

The results of my survey largely parallel the above pattern. For example, Question 4 asked "Would you do archaeological field or lab work if given the opportunity?" A substantial majority of respondents answered "Yes" (72.1 %), while 17.7 % said "No" and 10.2 % said "Maybe." This indicates that a large majority of the public at least sees participation in archaeology as an interesting possibility and worthy of some of their time.

Question 6 explored respondents' level of agreement with the concept of using public funds to protect and preserve archaeological sites (see Appendix A for exact wording). A total of 215 respondents answered this question, and all but 8 of them (96.3 %) agreed or agreed strongly (43.7 % said "Agree"; 52.6 % said "Agree Strongly"). Only

2 respondents said “Disagree,” and zero respondents replied “Disagree Strongly.” Interestingly, response to this question also mirrors nearly identical patterns of very positive public attitudes conveyed, specifically towards preservation and preventative or legal measures taken regarding site destruction, in the other three major archaeology-related surveys of the public commonly referenced in this thesis (Pokotylo and Guppy 1999; Ramos and Duganne 2000; Pokotylo 2002).

Lastly, Question 7 was a Likert scale question which asked, on a scale from 1 to 10 (with 10 being most important), “How important is archaeology in today’s society?” The results (mean = 7.7), well above the midline, suggest that the respondents in my survey sample general consider archaeology to be quite important to society. Each of these three questions deals with specific contexts which relate to the public’s attitude(s) towards archaeology in an oblique, indirect way. However, the results of all three questions, while certainly not providing a definitive view of the public’s attitude towards archaeology, do still paint a picture of a public that feels positively about archaeology.

Most of the archaeologist interview data relevant to attitude was described in the previous section: many archaeologists feel positively about public involvement – especially those which have the most experience with community or volunteer projects. Some archaeologists feel skeptical about public involvement, and some of the archaeologists involved in my Sauvie Island project grew less skeptical after the experience. There were no substantial patterns or themes related to attitude towards the public beyond these.

However, one non-field-participant archaeologist’s interview stands out from the rest in terms of public attitude towards archaeology. This archaeologist argued that the

public's interest would be lost when the archaeology they are engaging with becomes too small-scale, technical, or specific. For example:

Non-Field-Participant Archaeologist (Early 60's; CRM; Low EP): I know people are interested in big questions. They don't care about lithic analysis. They don't care about edge wear. If you start with that, then you've lost them. You have to understand what captivates their interest. A little subtext, and this is cynical, but if you open that box to tell the public what you're doing, they're not going to be very interested in supporting it. A lot of my work would not have public support.

In terms of the public's attitude towards archaeology, this archaeologist is suggesting that the public has the ability to feel very positively about archaeology, but that this attitude could become more negative if the details of, in this case, CRM archaeology work were made known. One implication of this suggestion is that the public's positive attitude towards the field is actually dependent upon a lack of awareness about the nitty gritty details of day-to-day archaeological work. On this note, while I received some criticism of specific logistical and training-related aspects of the project, the Sauvie Island public volunteers expressed overall entirely positive views towards archaeology and the experience of community archaeology in general.

Public Volunteer (Male, Age 46): I just think it was a really great and fun, good way to spend some time. Sort of felt good on a personal level but also felt like you were potentially contributing you know? I think it's interesting that, I don't know how it works, but I assume even if you don't find anything you've learned something. You learned that something was less likely to be found in a place.

Based on discussions like this in the volunteers' after-field interviews, the public volunteers appeared to have retained or even strengthened their positive attitude towards archaeology following the project.

3.3 Theme 2: Relevance of Archaeology to the Public

General Patterns re: Relevance of Archaeology to the Public

Based on studies of the public related to archaeology, people generally seem to value the study of the past. For example, respondents to one major survey gave a mean value of 7.3 out of 10 when asked about “the importance of archaeology in today’s society,” and 60 percent mentioned general interest in the past as a reasoning behind this assignment of importance level (Ramos and Duganne 2000: 23). I asked the same Likert scale question in my survey (“Question 7: From 1 to 10, how important is archaeology in today’s society?”) and got a similar result: mean of 7.7 out of 10. I also asked respondents “How important is the past to you?” and the result was even higher: mean of 8.4 out of 10.

If the above suggestions derived from the data are representative, and people are truly interested in archaeology and the past, then why do people still have partial understandings of archaeology, and why do many people (see discussion of major public surveys re: archaeology in Chapter 1) express difficulty seeing archaeology’s relevance to modern life? Many non-field-participant archaeologists discussed what they perceived as a problem of access to archaeology, whether it be a lack of public outreach programs, community archaeology opportunities, or a simple lack of education on the subject in schools. Several non-field-participant archaeologists and a handful of survey respondents specifically expressed the opinion that archaeology should be part of grade school curriculum for children.

However, access to archaeology might not automatically lead to people feeling that archaeology is relevant or important. As several non-field-participant archaeologists

discuss, poor communication can be a huge barrier to successful interaction between archaeologists and non-archaeologists, especially interaction which ultimately leads to the public gaining understanding of archaeology's relevance to their lives. One non-field-participant archaeologist presented the observation that learning to communicate archaeology effectively to non-archaeologists is not part of standard archaeological training, nor is it necessarily part of the process of most archaeological work. Therefore, archaeologists must learn, or develop their abilities, to communicate through other means. The archaeologist interviewee who made this point also suggests that one crucial element of successful communication has to do with relating archaeology to issues or ideas from modern life.

Relevance of Archaeology that Informs/Explains the Present/Future

The interviewee mentioned above was one of only a few archaeologists I interviewed who conveyed the idea that it was important to integrate discussion of what the archaeological past means to present or future concerns when interacting with the public. One archaeologist discussed how more members of the public would show interest in archaeology if they were aware of archaeology's ability to inform environmental policy. Another archaeologist expressed frustration at what they felt was an inability on the public's part to see the relevance of archaeology to present-day issues:

Non-Field-Participant Archaeologist (Early 40's; CRM; Low EP): It's sort of like when you think about algebra. People are always saying when you're in college and you're required to take that class, I'm never going to use this in my day to day life, why does this matter. This has no meaning to me, I don't care. There's very little personal investment in the history of our continent in general. I think people just aren't engaged with the past

and feeling that where we are today has a direct link with where we have been. I think that's a major barrier.

In contrast, this theme appeared very often in responses to my Portland area survey and in my interviews with the Sauvie Island public volunteers. For example, when asked what they thought the importance of learning about the past in general was, almost all of the public volunteers felt it was important to learn about the past mainly because of how it can inform or explain the present and/or future. 13 out of 16 public volunteer interviews included statements directly conveying this exact notion. Some of these statements focused on the idea that through studying the past, we can learn from past innovations and past ways of dealing with problems, or understand how we think similarly to past people. In the following example, a public volunteer focuses on the idea of studying the past through archaeology to not only learn from past mistakes, but in order to better understand generally how modern life came to be situated as it is today:

Public Volunteer (Female, Age 36): I think you can learn things from the past you wouldn't otherwise learn unless you do it yourself. The trial and error thing rather than ourselves doing it, we can learn from what others have done. Looking and finding what others have left behind can teach us about the experience of what they have gone through or experienced so that we can account for what we are experiencing in modern day life.

Despite there being no questions directly pertaining to this concept on my survey, over 22% of survey respondents mentioned the idea of the past informing or explaining the present/future at some point during their participation in the survey. "Information useful to the present/future" was the fourth most common out of 25 total response categories for open-ended Question 11 ("What do you think you might learn from doing archaeology?" – see Appendix K) and "Focus on work useful to the present/future" was

the sixth most common of 24 response categories for open-ended Question 12 (“What would you like for archaeologists to work on in the Portland area?” – see Appendix L). It is clear that the public relates to the concept of archaeology being able to address issues from the present or future. This particular awareness and interest on the part of the public is especially surprising and meaningful given the public’s partial understandings of archaeology. In other words, it is difficult to understand why many people who do not have a clear basic understanding of archaeology still believe it has the ability to shape or effect present day or future human life. While more research is necessary to get to the bottom of these complicated patterns, I think the public seeing and wanting connections between archaeology and modern life is an overall positive indication for the future of community archaeology. It can only be good if many members of the public view archaeology as able to contribute to modern day life – even if they might claim to see it as irrelevant in certain ways. Unfortunately, many of the archaeologists in my sample appear to either be unaware of the magnitude of this pattern of public thought, or to some degree ignorant of its potential importance to the issue of archaeology’s relevance to the public.

First-hand Engagement with Archaeology’s Scientific and Technical Aspects re: Archaeology’s Relevance

Question 9 of my Portland area survey asked respondents to rate the importance of science to society from one to ten – the mean response was 9.54. Clearly, science is seen in a positive light by the vast majority of the survey’s respondents. Perhaps related to this trend, particular scientific and technical aspects of archaeology appeared to play a

unique role in how the public Sauvie Island fieldwork volunteers viewed and expressed their relationship with archaeology and the past. A very common theme seen in many of the public volunteer interviews was the idea that the volunteer came into the project with an interest in archaeology and the past, but no formal experience studying it. When introduced to specific scientific field techniques, their appreciation for archaeology became relatable in a new way. Almost all of the public volunteers fondly discuss very specific technical details of field experience in their after-field interviews. One public volunteer keyed in on the use of a Munsell color chart and discussed this activity extensively in her post field interview. I suspect that some of this general positivity towards specific technical details of the archaeological experience results from the precise details of fieldwork becoming less of a mystery; after participation the actual practice of archaeology was more decipherable in terms of the scientific method, technical experimentation and documentation, and other aspects of science already familiar after years of general science education in, for example, grade school.

This is an interesting result especially given the contradictory way that many of the archaeologists I interviewed discussed the issue of whether or not the public could relate to, or productively participate in, the most scientific and technical aspects of archaeology (discussed in Section 3.2). The experience of the volunteers on my project clearly suggests that community archaeology participants key in on specific scientific details and that this process adds a new and meaningful dimension to the relevance of archaeology to their lives. One non-field-participant archaeologist with significant experience working with local communities took a slightly different approach when discussing this topic:

Non-Field-Participant Archaeologist (Late 50's; Agency, Very High EP): Well I think for one thing, people want something definitive. Like here's these [soil] colors, here's the information we can get out it, something we can latch onto and say OK I understand, we can do this. But archaeology or any other science on other more theoretical levels, they don't really have the training or the experience nor would we expect them to really get what that means or what we can learn from that. But if you give them something definitive to do they'll be more inclined to stick around because they have confidence to do that. It's just a part, you're giving them a part to do.

Following this line of thinking, members of the public who get something out of the more scientific and technical aspects of archaeology may be assigning particular importance to playing a well-defined role in something that reaches beyond the smaller scale context of the fieldwork tasks at hand. One public volunteer related the following:

Public Volunteer (Female, Age 29): Being hands on made me feel like I was contributing to something bigger than myself...I think we're stuck in our own little bubbles in life and overall that experience made me feel like I was helping to contribute to something bigger in trying to find signs of our past as a human race.

This public volunteer's quote brings up one final important aspect of the apparent value of engaging with archaeology's scientific and technical details; namely, that this engagement was primarily hands-on in nature. And, in being hands-on with archaeology, the experience is almost always in the form of one small, specific, often technical task at a time. This is by nature different than, say, reading about a famous archaeological site, or a past group of people, in a book, not just because the experience is more tangible and intimate, but because the scale and context of the experience is usually framed much more by technical and scientific characteristics. Most public volunteers conveyed the idea that the hands-on introduction to these types of details was very meaningful and

enjoyable to them, and a number of archaeologist interviewees from both samples noted the importance of hands-on public education or participation in archaeology. But no archaeologist I interviewed made the connection between hands-on learning/engagement, detailed technical aspects of archaeology, and the specific importance of these things to increasing the relevance of archaeology to the public.

Relevance of Archaeology & Connectedness to the Landscape

One of my underlying assumptions integral to this project was that connectedness to the local landscape plays an important role in the experience of doing archaeology (see Section 1.3). I attempted to test this assumption by asking public volunteers, prior to fieldwork on Sauvie Island, about their connection to the local land in the Portland area. Then after the fieldwork I asked them whether, and in what way, the fieldwork affected this connection. Most felt that the experience did affect their connection to the land. Some saw the landscape in a different way after adding a deeper or more detailed temporal element to their perception of place.

Public Volunteer (Male, Age 65): I'd say it deepened my connection certainly, and especially to Sauvie which I knew very little about in terms of its history. And even finding that rock fence line probably from the 19th century really made me appreciate even fairly recent habitation by humans and how, once the last person who was actually there and saw it with their own eyes is gone, that's the only way we retrieve anything from that time. So I think I developed more of an appreciation for the layers of habitation there, both Native American and Europeans.

Beyond the learning and experiencing of new aspects of the local landscape's history like this interviewee mentions, many of the volunteers also mentioned a connection they felt to the natural world while out doing archaeology. Some keyed in on

specific plants, land forms, or the tidal and seasonal changes in water levels – things that were mentioned as having been meaningful to past peoples, but which also seemed to take new life and meaning for everyone out conducting fieldwork. For example:

Public Volunteer (Female, 28): Learning about the plants, there was the plant with the purple flowers [camas], it grows from the bulb and they would do something with the bulb, and that was a big thing they would eat. Even little things, like just that learning that made me feel amazing and I loved it...it almost put me in their shoes and I could imagine what they were doing with that plant and it was really cool. I am an extremely empathetic person and that kind of thing just really gets across to me very strongly.

This pattern is perhaps not very surprising considering that many of the public volunteers discussed hiking, gardening, backpacking, and other active outdoor pursuits when asked about their connection to the local land. Several volunteers specifically mentioned deciding to participate partially because they wanted to spend time outdoors and get to know Sauvie Island better. A number of the volunteers felt that the Portland area was particularly suited for people who prefer to be more connected to the natural landscape because of the many available outdoors opportunities and the striking local geography (rivers, volcanic mountains, large trees, the Columbia River gorge, etc.). One public volunteer stated:

Public Volunteer (Female, 21): [T]he landscape here is very easy to immerse yourself in. It's very accessible but still very clean and wholesome and feels old and healthy.

This volunteer participant mentions the idea that the local landscape is “wholesome” and “old” a number of times, linking these perceptions of the landscape to thoughts about the physical fieldwork in a way that suggests both the landscape and the

archaeological materials we searched for lay in place, in some way untouched and undiscovered. The themes present in these types of statements by the public volunteers suggests that the natural landscape in which their archaeological experience occurred made archaeology relatable to things they already valued highly.

Five of the 16 public volunteers had grown up in northwest Oregon and had spent considerable time on Sauvie Island before. All but one of these five volunteers reported that their connection to the landscape did not significantly change after doing fieldwork, and that their experience served rather to confirm or expand what they already knew or felt about the area. The other volunteer who had a strong specific connection to the Sauvie Island area going into fieldwork, and who actually lives very near where the fieldwork took place, reported afterwards that the experience did substantially affect their sense of that portion of the island.

The other 11 volunteers all reported significant shifts in their connection to the local land after the experience. This is interesting because almost all of these 11 were not originally from Oregon, and reported widely varying connections to the landscape. Isolating any specific patterns in this group's responses is difficult, as some of the group had not spent much time in the Portland area, but have lived nearby for a long time and still felt a strong connection to the land there. Others had just recently moved from across the country and really enjoyed spending time outdoors in the Portland area but reported a low connectedness to the land simply because they were recent transplants. Still others were recent transplants but already reported a strong connectedness to the land for various reasons.

Through this web of meaning, it seems clear that while having spent many years in or near a place does tend to result in a stronger (reported) sense of place or connection to place, it is certainly very possible for people to quickly develop these connections under certain circumstances like, for example, an area being particularly suitable for connections made through outdoor activities. Following this line of thinking, community archaeologists seeking to understand and incorporate local connections to the natural landscape in their work could be more effective if they acknowledge that different types of people might require different types of experiences in order to have the natural setting of the experience affect their ability to relate to archaeology. This complexity and blending of ideas about the natural landscape demonstrates Escobar's (1999: 2) notion of "hybrid natures." Following his suggestion of not trying to describe a person's connection with or understanding of the natural world as limited to one, static category seems particularly reasonable in the context of community engagement with the past considering my results.

To further explore the importance of developing connections with the natural landscape to the experience of doing archaeology, I asked direct questions about this to all of the archaeologists I interviewed. Non-field-participant archaeologists were asked if, in general, they thought connection to natural place was important to doing or learning about archaeology. After Sauvie Island fieldwork was complete, field-participant archaeologists were asked whether they thought, looking back, that these things were important to the public volunteer's experience in the field.

All non-field participant archaeologists responded that connections with the natural landscape were very important, and all but two focused their response to the

question around the idea that archaeology can add a deeper sense of time to someone's overall perception of place in general. As described in the previous section, this was a common response that many public volunteers gave when describing how their connection to place shifted after doing archaeological fieldwork. However, only two non-field-participant archaeologists directly mentioned anything about the importance of specific elements of the natural landscape and how those play into the experience of doing archaeology – something that a majority of public volunteers discussed.

It is possible that, for unknown and unexplored reasons, the public generally relates the word archaeology with aspects of the natural world. In Pokotylo's 2002 survey of a large sample of the Canadian public, he found that many survey respondents mentioned themes like geology, rocks, and animals when asked about the nature of archaeology. Similarly, although not one of my survey questions mentioned the natural world, almost one in three (30.7 %) respondents mentioned something related to the natural world at some point during the survey. This number includes respondents who mentioned rocks, rivers, geology, mountains, trees, plants, and animals – but does not include mentions of dinosaurs, fossils, and bones. These mentions normally came up in responses to Questions 2 (“What do you think are the oldest things archaeologists might study in the Portland area?”), 11 (“What do you think you might learn from doing archaeology?”), and 12 (“What would you like for archaeologists to work on in the Portland area?”). This finding may relate to the Portland area's apparent proclivity towards interest in the outdoors and environmentalism (Abbott 2004). Or perhaps it is indicative of a connection, at least a word association – something like that seen between the public volunteers' engagement with human history and the natural landscape

described in the previous section – that links thinking about archaeology (especially prehistoric archaeology) with thinking about the natural landscape that was so important for the Portland area’s early inhabitants. It also seems possible that the public is thinking about mankind’s relationship with the natural world along the lines of Cronon’s (1996) notion of there being no real – only socially constructed – separation between mankind and nature. In other words, mankind, especially in the past, might be often perceived as part of nature, and that this perception is perhaps being communicated in the patterns I see within my survey and interview data. This is an angle I did not explore during my interviews with the public Sauvie Island volunteers.

The association between archaeology and the natural world I discuss above, especially when taken together with the pattern I observe of people focusing on archaeological knowledge that explains or informs modern day life, may also be suggestive of another, related conceptual angle I did not pursue during my data collection – namely, the idea of the “noble savage” (see for example Hames’ 2007 for further discussion of this concept). In other words, people may view archaeology as a way to engage with nature – or even the problems or issues of modern day human life – through the lens of an exaggerated or at least partially fictional perception of past people living harmoniously with their natural surroundings. In the context of my survey, for example, respondents may be seeing themselves and other modern day peoples as separated from nature, as Cronon (1996) suggests, while simultaneously perceiving of past peoples as more connected to nature. Therefore, they describe and discuss archaeological work using ideas and terminology related to the natural world. They may also believe that archaeologists pursue ways of improving life for modern or future humankind by

studying how past Indigenous peoples interacted – more sustainably or harmoniously, in their perception – with nature. However, I have no reliable way of saying for sure if the idea of the noble savage played any role in survey respondents’ answers, and a focused examination of my public volunteer’s interview transcripts revealed no direct reference to pre-contact Indigenous peoples demonstrating any particular closeness or harmony with the land. In fact, some of the archaeology we encountered in the field on Sauvie Island – and by extension the discussion surrounding our activities during fieldwork – was focused on early Euro-American settlers of the island, which makes distinguishing which past peoples are being referred to in the interviews difficult at times. Overall, I think more work is needed to draw many conclusions about these patterns concerning the natural landscape. However, I believe that my data contain a strong suggestion that the surrounding natural landscape can be an important factor in archaeology’s relevance to many non-archaeologists, irrespective of how they perceive of the idea of nature.

Interestingly, five out of 15 non-field-participant archaeologists mentioned, at some point in their interview, a difference in how people from rural versus urban settings might react to archaeology or perceive of the past in general. Three of these interviewees, including the one quoted above, suggested that people from rural areas may have stronger place attachment to the natural landscape in general than people from urban areas. Others suggested that people in urban settings like the Portland area might be particularly unaware of material human history because of the idea that the past has largely been obscured by modern development. Cronon (1996) makes the argument that people from rural areas have a less romanticized view of nature than people from urban areas.

Unfortunately, I did not ask interviewees directly about where they live, or explore this

general subject in any detail in the interviews. Also, I do not have any strong data from my survey or other interview types to cast any additional light on the topic. However, this particular aspect of sense of place seems likely to have substantial potential for relating to community archaeology's ability to enhance the relevance of archaeology to public participants.

3.4 Theme 3: Reflexive Examination of Community Archaeology

What is Gained from Community Archaeology?

Speaking of community archaeology exclusively, several patterns dominated discussion in my interviews about what was personally gained from the experience of doing community archaeology. For archaeologists who led teams comprised of members of the public during community fieldwork on Sauvie Island *and* for the few non-field-participant archaeologists who had past experience doing explicit community archaeology, three main aspects comprised the majority of discussion about what they gained. First, many of these archaeologists felt a sense of personal satisfaction in getting to share their knowledge and skills and feel connected to something bigger than, for example, the context of a project, site, or job.

Non-Field-Participant Archaeologist (Mid 30's; Tribe; Low EP):

There's some satisfaction that I get to maybe not prove but at least show some evidence that I have a special skill used out here because I'm trying to keep things from getting destroyed. Just finding something and showing them something it gives me satisfaction.

Similarly, all but one of the field-participant archaeologists mentioned an element of personal satisfaction when describing what they gained from the Sauvie Island experience. Usually this revolved around the ability to spark and maintain interest on the

part of the public volunteers throughout the experience. Secondly, and related in many ways to the first aspect described above, many archaeologists who had done community archaeology before enjoyed the social aspect of concentrated, personal interaction with members of the public. This again made archaeologists feel connected and added an element of excitement and fun to their otherwise serious work.

Non-Field-Participant Archaeologist (Mid-20's; Museum; High EP): I think that was an amazing experience because really it does two things. The public gets involved and it enriches their life so they feel a better connection to the place they live, which is what we should be doing, it helps create communities and all that stuff. But it also helps the archaeologist, beside the fact that it gives you a break during the day when you don't have to dig and talk to people for fun. It also helps you get a better idea for the community that you're inevitably serving instead of just looking at trying to pull data out of the ground.

Lastly, several archaeologists discussed community work as a desirable new challenge for them. For example, four of the six field-participant archaeologists mentioned in their pre-field interviews that intensive interaction with the public might help with their teaching, interpersonal, and/or leadership skills.

For the public volunteers who took part in Sauvie Island fieldwork, personal gain from the experience took three major apparent forms. First, public volunteers enjoyed feeling part of a bigger scientific undertaking. Second, almost all public volunteers reported that they enjoyed the experience of learning – about archaeology, local place, and/or the natural landscape. One public volunteer felt that the personal, hands-on type of learning actually helped mold their perspective on the world:

Public Volunteer (Female, Age 28): I'm so glad that I was able to be a part of the project it really was amazing and eye opening for me. It helped me almost to look at the world with a little bit of a different perspective

because it's one thing to read about things in text books but to actually participate in something is really meaningful.

Lastly, similar to the archaeologists mentioned directly above, many of the public volunteers enjoyed the social aspect of the experience. In fact, for some, this was a primary reason for even participating in the field project.

Public Volunteer (Female, Age 21): I think in conjunction with all the other exploring I've been doing...getting out and meeting new people. Taking part in some of the history and the actual physical landscape definitely ties me to it better and allows me to connect to people better and gives me something to talk about.

Interestingly, this public volunteer not only generally lauds the social potential for meeting people through the project, they also mention that connecting with the natural landscape and the human history contained there was a facilitator for social interaction. This is exactly the type of connection that Wright (2015) and Raymond et al. (2010) discuss in terms of the landscape being a medium for community engagement and relationship building.

As touched on in previous sections of this thesis, the archaeologists in my samples seem to be aware of certain aspects of the public's experiences – regarding what they gain, what they desire to gain – when doing archaeology, and largely unaware of other aspects. They appear to understand and appreciate the ability for archaeology to add meaning to people's sense of place and to bring people together in an enjoyable, social atmosphere of learning, as well as the overall potential for participation in community archaeology to increase people's engagement with, and knowledge of, archaeology. However, many of the archaeologists I interviewed did not mention community archaeology's ability to engage people with the natural landscape and specific scientific

and technical aspects of the discipline, and also did not mention the desire on the part of the public for an archaeology that is relevant to present and future concerns.

Almost all of the archaeologists (both samples) I interviewed tended to do one or both of the following: 1) discuss the benefits of community archaeology almost entirely in terms of benefit to archaeology, archaeologists, and/or preserving the past, and 2) be unclear about whom a particular aspect of archaeology is supposed to benefit. There were a few exceptions – two or three archaeologists who consistently discussed benefits both for the public and for archaeology while making these distinctions clear. But by and large, the archaeologists in my sample were unclear about this, and many of them did not mention any type of benefit for the public.

This pattern illuminates what I believe could be a major problem going forward with community archaeology. The public largely pays for archaeology, and as several of the archaeologists I interviewed discussed, the human past we study is in many ways shared; in other words, the benefits of its study should exist outside the institutional or professional realm of archaeology. My survey also clearly shows the public puts much value in the past and its study. For these reasons, I argue it is crucial to the future of community archaeology not only that archaeologists avoid *focusing* on potential benefits to archaeology rather than to society at large, but also in the thoughts, actions, and discourse that comprise their work, be explicit concerning who is benefiting from archaeology and in what way.

Barriers to Community Archaeology

In all the archaeologist interviews, lack of time and/or funding was the most commonly discussed barrier to increased public involvement in archaeology. In fact, after running a code co-occurrence analysis (Appendix N) on my interview codes in ATLAS.ti, the co-occurrence of “barrier” and “funding” was by far the most frequent of all co-occurrences. Many archaeologists mentioned that funding sources for community projects are rare and hard to come by, and without extra allotted funding, it is difficult to put in the extra time to make a project work.

The second most common barrier to community archaeology identified by archaeologists was an ignorant public. This is both in the sense of lack of education about archaeology leading to lack of awareness, interest, or knowledge about the discipline *and* in the sense that an untrained public could, whether purposefully or not, damage the archaeological record without the proper oversight and care taken. I discussed the latter element of this previously in Section 3.1, but many archaeologists conveyed distinct ideas about the former in their interviews. Specifically, over half (53.3 %) of non-field-participant archaeologists mentioned the importance of education and introducing children to archaeology, without having been directly asked about children or even education. Clearly, the belief is common among archaeologists that education, specifically of children, can help to break down this “ignorant public” barrier to community archaeology. Another, related barrier brought up by two non-field-participant archaeologists was that a lack of visible archaeology sites might correlate with low interest and knowledge levels in the Portland area. Both of the archaeologists who

brought this up had worked in the southwest United States, where Ancestral Puebloan cliff dwellings and pueblos draw much public attention and are often very visible.

The last barrier that was discussed, in this case by 60 % of non-field-participant archaeologists, was the idea that the regulatory-driven nature of the CRM realm of archaeology itself was a potential obstacle to community archaeology. In concurrence with some published archaeologists (e.g. Waterton 2005; Dawdy 2009), these interviewees saw CRM archaeology as lacking the ability to incorporate public participation – whether it be in terms of lack of available time, funding, legal flexibility, interest, or archaeologists trained in public outreach. Others simply saw much of CRM archaeology as being so methodical and rigidly structured, where projects move from one predetermined step to the next as quickly as possible, that there is just no point in the process in which seeking meaningful input or participation from the public would even make sense.

Non-Field-Participant Archaeologist (Late 50's; Agency, Very High EP): As far as volunteers and the public actually being able to participate, that's a stumbling block. Particularly for a CRM company, there's no way that they can have volunteers do things because there's just too much liability, and it is kind of counter-productive for them, they're supposed to be making money...

In contrast, some archaeologists have actually suggested that CRM is a good, or even the best, context for community archaeology projects to be developed in (Chirikure and Pwiti 2008). This is because in some cases there is more funding for, and direct community interest in, public participation in CRM as opposed to academic contexts – perhaps because CRM projects occur with greater frequency, and in a greater variety of

contexts. These contexts are often tied in with various types of work on locations, buildings, parks, or infrastructure that many people already have connections to.

Chapter 4: Conclusions & Recommendations

4.1 Summary of Findings

My findings suggest that people relate to archaeology differently, and that these different perspectives on the relevance of archaeology play important roles in defining people's experiences participating in community archaeology. The archaeologists I interviewed had many different ways of describing how people relate to archaeology, and for what reasons, and the connections the public drew in their survey and interview responses between their lives and archaeology were manifold. Many archaeologists feel that there are specific factors or processes which increase or decrease the public's ability to engage with archaeology. Many members of the public, including participants in my community archaeology project, keyed in on highly specific, technical aspects of archaeological fieldwork, as well as aspects of archaeology that relate to present or future societal issues.

I hypothesized going into this project that the diversity of ways in which the public engages with, relates to, and reacts to archaeology, briefly mentioned above, is not well understood by most archaeologists. On one hand, my hypothesis was supported by my results. Many archaeologists, often when directly queried about these issues, either failed to mention, or focused on factors unrelated to, key aspects of the public's relationship with archaeology that public interviewees or survey respondents consistently mention as important. On the other hand, my hypothesis was refuted by the fact that many of the archaeologists I interviewed who had experience in community archaeology projects – including those who were being interviewed after taking part in my field

project – expressed ideas and observations that demonstrated exceptional awareness of how the public engages with archaeology.

My hypothesis that the public was generally uninformed about archaeology was fundamentally refuted by my results. Respondents to my public survey showed unexpectedly high awareness of key aspects of archaeological work. Respondents also tended to simultaneously harbor accurate and inaccurate perceptions of archaeology, rather than just inaccurate ones, suggesting that the public’s knowledge of archaeology is partial rather than generally uninformed.

My hypothesis that connection to the local natural landscape was an important factor in the experience of doing archaeology was strongly supported by my results. Archaeologist interviewees unanimously agreed that these concepts were highly important, discussing a great variety of ways that the physical or geographical context of archaeology manifests in the perceptions and reactions of archaeological participants. I found that many members of the public relate archaeology with the natural world. Pre-existing ties to the natural landscape were important to public volunteers going into the field project, but the ways these ties ultimately related to the experience of doing archaeology were so variable and nuanced after the project that these things were nearly indescribably diverse and complex. However, it was clear that the natural landscape served as an important medium through which people developed connections with the human past.

Lastly, several important results do not relate directly to any of my hypotheses per se. For example, the public is extremely interested in archaeology and participating in archaeology, yet many archaeologists are wary of public involvement in their field. Also,

some archaeologists noted the idea that public involvement may improve archaeological work through the ability of the public to add local knowledge and call archaeologists' assumptions into question. Finally, both the public and archaeologists involved in my field project generally tended to gain personal satisfaction and edification from the experience, express increased enthusiasm for future participation in community archaeology, and enjoy the communal and social aspects of the experience.

4.2 Problems and Next Steps

With my community archaeology project, and the data I collected and analyzed from surveys and interviews, I generally met my research goals of conducting and assessing a community archaeology project, examining this assessment critically, and evaluating my findings against the thoughts and observations of the local archaeologists and non-archaeologists I surveyed and interviewed. However, because not many critical assessments of, nor mixed-methods or ethnographic explorations of, community archaeology have been published, this project was very exploratory and precursory by nature. As such, there are numerous portions of the project that I would attempt to improve upon in similar future efforts, and many issues and findings that I believe are worthy of additional examination.

Because of the somewhat limited scope of this thesis project, I think that all of the above primary issues and patterns that arose in my results generally deserve further exploration. However, several of my major findings, as well as other issues, themes, and mistakes that arose during this project, should be specifically addressed before considering and designing further research:

Survey Question 10 and what is gained through systematic study of the past?

My survey Question 10, which explored the importance of studying the past in a systematic vs. non-systematic way – and which was also pitched to all of my public volunteer interviewees – is a good example (see Appendix F). I believe the question leads respondents towards the obviously “easiest” third of three answer options (“Or these are equally important”). I think that the concept of specifically exploring what the systematic nature of archaeology adds to people’s general engagement with the past is extremely important to understanding the experience of community archaeology, and should be explored more in the future. Some of the results from this question were interesting – for example several interviewees said that anecdotal and story-based information about the past is less reliable than hard archaeological data. However, I ultimately omitted the results of this question from discussion in my thesis because I thought that the question was inadvertently leading.

Further analyses and community as a “monolith”

To some degree, the scope of my project limited me from exploring intra-sample variation, resulting in a largely homogenous representation of both the public and archaeological communities I examine. In my analysis of the archaeologists’ interviews I do mention and compare factors related to the interviewee’s professional experience level and type, but much more could be said about these factors and, unfortunately, the picture I paint of the *public* in this project is monolithic and static. As mentioned in Section 2.5, detailed quantitative analyses of my public survey data comparing responses from people

of different ages or education levels, or people at different location types, could work towards understanding diversity within my survey sample. In the same vein, a bigger sample of public volunteers in a future project would allow me to perform similar analyses on their interview data – for example exploring how people from different backgrounds react to the experience of doing archaeology.

Similarly, in Chapter 2, I mention issues concerning seeking a more diverse and representative survey sample. Beyond seeking a larger sample, I think that more rigorous methods of reflexive and continuous self-assessment during (especially the beginning portions of) administering a survey could lead to a better ability to capture a range of different publics within one sample. For example, I could conduct small pilot tests of 15 or 20 respondents at different locations and compare the spread of demographics to local census data to try to gauge what sort of people I was encountering there. I could modify the demographic information I am collecting to match the language used by the federal census. Also, collecting information about ethnicity and income and using this kind of information to inform my survey collection design could further improve the diversity in my sample, and help to avoid presenting ideas about the public that do not take into account the nuanced differences present among different members of that public.

Deeper exploration of the community archaeology experience

I believe that I could have asked more direct questions and probed more deeply into participants' thoughts and feelings about the community archaeology experience. I gathered mostly general impressions from these interviews while more specific, detailed observations would have added richness and depth to my results. For example, all of the

negative feedback I got about the experience focused on relatively minor and superficial, mostly logistical aspects of the experience that participants said they would like to see improved. In the future, I would dig deeper to get at participants' critical perceptions of more fundamental and conceptual aspects of the experience. How did it meet their expectations? How did their level of involvement make them feel? What role would they ideally play in archaeological fieldwork? Did they feel like they had agency in the process?

4.3 Recommendations

I attribute some of the shortcomings of this project mentioned above in part to the exploratory and precursory nature of this project. In other words, I attempted to tackle a broad range of concepts and issues in order to see what patterns stood out as most important. In this sense, while some aspects of my work are limited or otherwise problematic, the main value of my results is that they provide a starting point for further, more focused research concerning the experience of community archaeology. In my analysis I have pinpointed a number of key themes and issues of clear importance to the development of community archaeology. Sharing findings like these and maintaining a continuous dialogue about community archaeology's progress is crucial to fostering mutually beneficial relationships among public and archaeological communities. To this end, I transpose the most essential of these themes into a list of recommendations for community archaeologists (Table 8).

Table 8. Recommendations for Future Community Archaeologists

Recommendation	Portion of Thesis Referenced
You can conduct ethical work/produce quality results AND work with the public – these things are not mutually exclusive. The fear of the public destroying archaeological materials in community archaeology contexts is largely unfounded and the more experience working with the public an archaeologist has, the less they tend to fear this.	Pp. 57-62
Take time to advocate for educating the public in your work. This education is necessary because many people are interested in archaeology and the past, yet lack a complete or wholly accurate understanding of what archaeologists study and do in their work.	Pp. 47-54, 63-65
Involve the public in your work because many members of the public bring valuable skills and knowledge to the table, and because having people question you and your methods is a scientifically sound practice.	Pp. 54-56
Involve the public in your work because many archaeologists find this to be fulfilling and satisfying.	Pp. 79-80
Allow the public to engage with scientific and technical details as most members of the public respond quite favorably to this experience, and doing so makes archaeology relevant in profound ways to the public. Do not dumb down archaeology.	Pp. 69-71
Be clear about some of the basics of archaeology with the public to help dispel common misconceptions – namely, that archaeology is not biology or geology (and, to a lesser extent, paleontology), that archaeologists spend all or most of their time digging, that most archaeologists are funded through private organizations, museums, or schools, and that archaeologists only study certain periods or aspects of the human past.	Pp. 47, 49-53, 75-77, general survey results (Figure 4, Table 7, Appendices H-L)
Try to factor connections between the archaeological past and the present/future of humankind into your work, as it is very important to making archaeology relevant to non-archaeologists.	Pp. 67-69
Remember that the landscape in which archaeological fieldwork takes place is very important to the experience of doing	Pp. 71-78

archaeological fieldwork. People take particular interest in the natural world. People already interested in the natural world and outdoor activities may be particularly suitable participants in community archaeology projects.

Encourage and nurture social interaction during community archaeology. Both archaeologists and the public assign great meaning to this. Pp. 79-81

Be clear in your thinking, speaking, and writing about who your work is meant to benefit. Interaction of archaeologists with the public, whether it be through community archaeology or not, should not be for the benefit of archaeologists or archaeology alone. Pp. 81-82

Be creative in finding ways to overcome the barriers of time and money to community archaeology. There are many people interested in learning about the past together and they can help you. Pp. 82-84

Integrate qualitative, mixed methods or ethnographic assessment and exploration into your community project and share the results. This is one of the ways that archaeologists can help community archaeology grow. Pp. 16-17; 89-90

Consider the possibilities of community archaeology within a CRM context. Many archaeologists perceive the realm of CRM as a barrier to public involvement. However, the interest shown by the public in the details and experience of fieldwork (in my case, survey), and the variety and frequency of CRM projects occurring across the country suggests great potential for developing programs within the existing infrastructure of CRM. Pp. 83-84

Through this project I gained substantial first-hand experience with conducting mixed methods research. I strove to achieve more than just general and theoretical speculation about the nature of the community archaeology by trying to understand the perceptions and understandings of many different people. Through this process, my research worked towards developing an understanding of how people see and relate to

archaeology, and how community archaeology relates to, benefits, and engages the people who participate in it. Continuing to hear and explore a diversity of voices will benefit the development of community archaeology, perhaps allowing community archaeology to confer ever-increasing benefit to public participants, archaeologists, and society as a whole.

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Appendices

Appendix A Field-Participant Archaeologist Pre-field Interview Questions

1. Describe any past experiences in archaeology that you have had that may be similar to this project.
2. Do you feel that involving the public in scientific archaeology is important for the profession? What about for you personally? Why or why not?
3. What do you expect to learn from this experience?
4. Do you plan on actively working with local communities in your future in archaeology?
5. Determine age/gender/education level (i.e. high school or less, technical-vocational post-secondary, or university).*

*taken from Pokotylo & Guppy 1999

Appendix B Field-Participant Archaeologist Questions

1. In terms of “good”, “excellent”, “fair” or “poor”: rate your overall experience working with volunteers from the public during this project.
2. In terms of “good”, “excellent”, “fair” or “poor”: categorize the overall experience of the volunteer participants and explain.
3. Do you think that sense of place was an important factor in the volunteer participants’ experience? If so how?
4. Do you feel that involving the public in scientific archaeology public is important for the profession? What about for you personally? Why or why not?
5. What did you learn from this experience?
6. If you gained something from this experience, was it A) new knowledge or perspectives about the area, the archaeological materials encountered, and/or the process of archaeology, B) personal satisfaction, C) a combination of A) and B), or D) something else entirely?
7. Do you plan on actively working with local communities in your future in archaeology?

Appendix C Public Volunteer Pre-field Interview Questions

1. How would you define the term archaeology?
2. Describe any archaeological experience you have had (in the field, in a museum, reading a book or something online...)
3. Who do you think pays for archaeology?
4. Do you think it is important to learn about the past? Why?
5. Do you think it is important to learn about the past in a systematic, scientific way (like an archaeologist going out and carefully digging, documenting, and publishing in a journal)? Or do you think people get more out of learning about the past in their own way (going out and finding stuff on your own, watching TV or reading popular books, talking to your elders, etc..)?
6. Describe your connection to the land in the Sauvie Island/Portland area.
7. Do you think that doing archaeology could change this connection to the land at all? How so? Or why not?
8. What do you expect to gain from this experience?
9. Determine age/gender/education level (i.e. high school or less, technical-vocational post-secondary, or university).*

*taken from Pokotylo & Guppy 1999

Appendix D Public Volunteer Post-field Interview Questions

1. How would you define the term archaeology?
2. In terms of “good,” “excellent,” “fair,” or “poor”: describe your experience in this fieldwork.
3. Do you think it is important to learn about the past? Why?
4. Do you think it is important to learn about the past in a systematic, scientific way (like an archaeologist going out and carefully digging, documenting, and publishing in a journal)? Or do you think people get more out of learning about the past in their own way (going out and finding stuff on your own, watching TV or reading popular books, talking to your elders, etc..)?
5. Do you think your experience changed your connection to the local landscape at all? How so? Or why not?
8. Did you gain anything from this experience? If so what?

Appendix E Non-Field-Participant Archaeologist Interview Questions

1. Summarize the different ways you have interacted with the public as part of your professional archaeological career. Have you worked on projects that are explicitly framed as community or public archaeology?
2. Overall, how do you feel about your experiences working with the public in the course of your work? (Give examples of pros, cons, bad or good experiences).
3. If you gained something from this experience, was it A) new knowledge or perspectives about the area, the archaeological materials encountered, and/or the process of archaeology, B) personal satisfaction, C) a combination of A) and B), or D) something else entirely?
4. Do you feel that involving the public in scientific archaeology is important for the profession? For the public? For you personally? (Why or why not? – for both)
5. Are there barriers to community/public archaeology? If so, what are they?
6. Do you think that archaeology can affect people's sense of place? If so, how?
7. Do you think that there are specific types of people who would be most interested in doing community archaeology? If so who? Are there any unique attributes of the Portland area population that might make them more or less likely to want to do community archaeology?

Appendix F Portland Area Public Survey Questions

1. What do you think archaeologists do in their work?***
2. What do you think are the oldest things archaeologists might study in the Portland area?
3. Have you ever done archaeology in a laboratory or in the field?
4. Would you participate in archaeological field or lab work if given the opportunity?
5. Who do you think pays for archaeology?
6. Do you agree or disagree with the following statement: public funds should be used to protect and preserve archaeological sites. *Follow-up: agree/disagree or strongly agree/disagree?****
7. From one to ten (ten being very important), how important is archaeology in today's society? (in your opinion)**
8. From one to ten (ten being very important), how important is the past to you?
9. From one to ten (ten being very important), how important is science to society (in your opinion)?
10. CHOOSE ONE of the 3 following statements:
 - To learn about the past in a systematic, scientific way (like an archaeologist going out and carefully digging, documenting, and publishing) is most important
 - To learn about the past in your own way (e.g. going out and finding stuff on your own, watching TV or reading popular books, talking to your elders) is most important
 - OR these are equally important
11. What do you think you might learn from doing archaeology?
12. What would you like for archaeologists to work on in the Portland area? And if clarification needed: Say you had the chance to design an archaeology project in the Portland area, what would you do? Explore the history of a specific location, or a specific group, or cultural practice etc.?
13. Determine age/ gender/ education level (i.e. high school or less, technical-vocational post-secondary, or university*).

Date:

Paid/Unpaid

Location

*taken from Pokotylo & Guppy 1999

**taken from Ramos & Duganne 2000

Appendix G Portland Area Public Survey Results Summary

Overall results summary:

- Interest in archaeology, and participating in archaeology, was high. Knowledge level was somewhat higher than expected, but patterns of partial knowledge about the nature of archaeological work were pervasive.
- Respondents assigned high value to the importance of archaeology and science to society, and to the past in general.
- While not many respondents indicated direct awareness of the publicly funded nature of most archaeology, most respondents supported publicly funding archaeological work.
- Most people thought it was equally important to study the past in a systematic, scientific way and in a more personal, informal way.
- People expect to learn a wide range of things from doing archaeology.
- Many people want archaeologists to focus on work related to Native Americans
- Many respondents did not fully or comprehensibly answer questions asking about their expectations and suggestions re: archaeology.

Question 1 (n=254): What do you think archaeologists do in their work?

- Answers varied widely. Coded results are presented in Appendix I. The three most common answers were “Dig” (39.8 %), “Gather information about the past/history” (25.2 %), and “Research” (13.8 %).
- Results conveyed partial understandings about the nature of archaeology. Only 98 out of 254 survey respondents (38.6 %) provided final, complete, and accurate answers that did not include a reference to something archaeologists do not normally do in their work (e.g. study dinosaurs).
- Only 18 respondents (7%) provided a complete response that clearly demonstrated an understanding that archaeologists study the material human past in order to help understand past human lives and/or behaviors.

Question 2 (n=254): What do you think are the oldest things archaeologists might study in the Portland area?

- Answers varied widely. Coded results are presented in Appendix J. The three most common answers were “Native Americans/Indians” (40.6 %), “Animals/Plants” (12.2 %), and “Fossils” (11.4 %).
- Results conveyed some partial understandings about the nature of archaeology. Only 95 out of 254 survey respondents (37.4 %) provided final, complete answers that were, for all intents and purposes, correct, i.e. indicated either Native American material remnants or a date range between 9 and 15 kya

Question 3 (n=254): Have you ever done archaeology in a laboratory or in the field?

- “No” = 230 out of 254 respondents (90.6 %)
- “Yes” = 24 out of 254 respondents (9.4 %)

Question 4 (n=254): Would you participate in archaeological field or lab work if given the opportunity?

- “No” = 45 out of 254 respondents (17.7 %)
- “Yes” = 183 out of 254 respondents (72.1 %)
- “Maybe” = 26 out of 254 respondents (10.2 %)

Question 5 (n=254): Who do you think pays for archaeology?

- Coded results are presented in Appendix K. The three most common answers were “Government” (44.1 %), “Private” (42.5 %), and “Universities/schools” (37.8 %).

Question 6 (n=215): Do you agree or disagree with the following statement: public funds should be used to protect and preserve archaeological sites. Follow-up: agree/disagree or strongly agree/disagree?

- “Agree” = 94 out of 215 respondents (43.7 %)
- “Agree strongly” = 113 out of 215 respondents (52.6 %)
- “Disagree” = 2 out of 215 respondents (0.9 %)
- “Disagree strongly” = 0 respondents
- No answer = 6 out of 215 respondents (2.8 %)

Question 7 (n=254): From one to ten (ten being very important), how important is archaeology in today’s society? (in your opinion)

- Mean = 7.66 out of 10

Question 8 (n=254): From one to ten (ten being very important), how important is the past to you?

- Mean = 8.40 out of 10

Question 9 (n=254): From one to ten (ten being very important), how important is science to society (in your opinion)?

- Mean = 9.58 out of 10

Question 10 (n=254): CHOOSE ONE of the 3 following statements:

-(Option #1)To learn about the past in a systematic, scientific way (like an archaeologist going out and carefully digging, documenting, and publishing) is most important

-(Option #2)To learn about the past in your own way (e.g. going out and finding stuff on your own, watching TV or reading popular books, talking to your elders) is most important

- OR these are equally important

- Option #1 = 36 out of 254 respondents (14.2 %)
- Option #2 = 24 out of 254 respondents (9.5 %)
- “Equally important” = 192 out of 254 respondents (75.6 %)
- No answer = 2 out of 254 respondents (0.8 %)

Question 11 (n=254): What do you think you might learn from doing archaeology?

- Answers varied. Results are presented in Appendix L. The three most common answers were “About history/the past” (24.4 %), “About life in the past” (18.9 %), and “About past people” (15 %).
- Many respondents (37 %) either provided responses that were extremely brief or consisting of incomplete or incomprehensible thoughts, did not answer the question, or said “I don’t know.”

Question 12 (n=216): What would you like for archaeologists to work on in the Portland area? And if clarification needed: Say you had the chance to design an archaeology project in the Portland area, what would you do? Explore the history of a specific location, or a specific group, or cultural practice etc.?

- Answers varied very widely – the public has many different kinds of suggestions for local archaeologists. Coded results are presented in Appendix M. The three most common answers were “Don’t know” (16.9 %), “Focus on Native Americans” (16.9 %), and “Focus on nature/rivers/geology (15 %).
- Many respondents (45.1 %) either provided responses that were extremely brief or consisting of incomplete or incomprehensible thoughts, did not answer the question, or said “I don’t know.”

Respondent Age (n=254)

- Mean = 43; Median = 39

Respondent Gender (n=254)

- Females = 133 (52.4 %)
- Males = 120 (47.2 %)
- No answer = 1 (0.4 %)

Respondent Education (n=254)

- University = 221 (87 %)
- Technical/Vocational Post-Secondary = 10 (3.9 %)
- High School or Less = 23 (9.1 %)

Appendix H Survey Question 1 Results: “What do you think archaeologists do in their work?” (n=254)

Categorized Response	n (%)
Dig	n=101 (39.8 %)
Gather information about the past/history	n=64 (25.2 %)
Research	n=35 (13.8 %)
Study/find artifacts	n=35 (13.8 %)
Work at sites/in the field	n=26 (10.2 %)
Study old/ancient cities/civilizations	n=26 (10.2 %)
Study past culture/society	n=24 (9.5 %)
Study/find bones	n=17 (6.7 %)
Study humans	n=17 (6.7 %)
Study/find old things	n=15 (5.9 %)
Study geology/landforms/rocks/soil	n=14 (5.5 %)
Excavate	n=14 (5.5 %)
Analyze/evaluate/catalog	n=13 (5.2 %)
Unearth/uncover	n=13 (5.2 %)
Study/find fossils	n=12 (4.7 %)
Study way of life/habits	n=11 (4.3 %)
Preserve history	n=8 (3.2 %)
Explore/investigate	n=7 (2.8 %)
Study/find dinosaurs	n=7 (2.8 %)
Study/find evidence	n=6 (2.4 %)
Study old buildings/structures	n=5 (2 %)
Study buried things; Survey/search the land;	n= < 5
Piece things together; Teach/educate; Work in	(< 2 %)
Egypt/other countries; Interpret; Study origins;	
Study how things used to be; Study geography;	
Write/publish; Carbon date; Find treasure;	
Document; Study animals/plants; Create stories;	
Study Indians/natives; Reconstruct; Study aliens,	
Imagine	

Appendix I Survey Question 2 Results: “What do you think are the oldest things archaeologists might study in the Portland area ?” (n=254)

Categorized Response	n (%)
Native Americans/Indians	n=103 (40.6 %)
Animals/plants	n=31 (12.2 %)
Fossils	n=29 (11.4 %)
Dinosaurs	n=22 (8.7 %)
Rocks	n=15 (5.9 %)
Bones	n=14 (5.5 %)
Historic buildings/structures	n=12 (4.7 %)
9 to 15 kya/ Ice Age	n=11 (4.3 %)
Early Europeans/Euro-American	n=10 (3.9 %)
Volcanoes	n=8 (3.5 %)
River	n=7 (3.1 %)
500 years old	n=5 (2 %)
Geology	n=5 (2 %)
Don't know/nonsensical answer; Glaciers; Soil; 1.5 to 2 kya; Old things; Nature; Tunnels;	n= < 5 (< 2 %)
Millions of years old; 1800's; 1600's; Missoula Flood; Shipwrecks; Landforms; Immigrants; Pottery; 40 kya; 200 kya; Paleolithic; Graves; Mexican civilizations; Caves	

Appendix J Survey Question 5 Results: “Who do you think pays for archaeology?” (N=254)

Categorized Response	n (%)
Government	n=112 (44.1 %)
Private	n=108 (42.5 %)
Universities/schools	n=96 (37.8 %)
Grants	n=71 (28 %)
Public/taxpayers	n=24 (9.5 %)
Museums	n=21 (8.3 %)
Don't know	n=8 (3.2 %)
No answer/meaningless answer	n=4 (1.6 %)
Native Americans	n=3 (1.2 %)
Archaeologists	n=2 (0.8 %)
Selling artifacts for profit	n=2 (0.8 %)
Publishers	n=1 (0.4 %)
Non-profits	n=1 (0.4 %)

Appendix K Survey Question 11 Results: “What do you think you might learn from doing archaeology?” (n=254)

Categorized Response	n (%)
About history/the past	n=62 (24.4 %)
About life in the past	n=48 (18.9 %)
About past people	n=38 (15 %)
Information useful to the present/future	n=27 (10.6 %)
About humans	n=22 (8.7 %)
Meaningless answer	n=20 (7.9 %)
Comparison of past to present	n=18 (7.1 %)
How archaeology is done	n=17 (6.7 %)
Something new/different	n=16 (6.3 %)
About a specific place/area	n=12 (4/7 %)
About environment/natural world	n=11 (4.3 %)
Make hands-on/personal connection	n=10 (3.9 %)
About myself/self-improvement	n=10 (3.9 %)
Appreciation for the human past	n=5 (2 %)
About the world	n=5 (2 %)
Information useful to the present/future, re: sustainability/environment	n=4 (1.6 %)
Explanation(s) of the present	n=4 (1.6 %)
Stories	n=3 (1.2 %)
Don't know	n=2 (0.8 %)
Dinosaurs	n=2 (0.8 %)
About how archaeology is careful/tedious work	n=2 (0.8 %)
Information useful to the present/future, re: medicine/disease	n=2 (0.8 %)
Truth	n=1 (0.4 %)
About crystals	n=1 (0.4 %)
About aliens	n=1 (0.4 %)

Appendix L Survey Question 12 Results: “What would you like for archaeologists to work on in the Portland area?” (n=216)

Categorized Response	n (%)
Don't know	n=43 (16.9 %)
Focus on Native Americans	n=43 (16.9 %)
Focus on nature/rivers/geology	n=28 (11 %)
Focus on specific local area	n=26 (10.2 %)
Do basic archaeology (e.g. find/dig sites, record and explain human history)	n=20 (7.9 %)
Focus on work useful to the present/future (ALL)	n=19 (7.3 %)
Educate (general)	n=15 (5.9 %)
More preservation/protection	n=12 (4.7 %)
Focus on work useful to the present/future re: sustainability/survival/environment	n=12 (4.7 %)
Focus on specific aspect of past people	n=10 (3.9 %)
More involvement of public	n=9 (3.5 %)
Focus on specific past event/time period	n=8 (3.2 %)
Focus on historic buildings	n=7 (2.8 %)
Focus on work useful to the present/future (general)	n=7 (2.8 %)
Focus on something non-archaeological (e.g. dinosaurs)	n=6 (2.4 %)
Focus on issues related to minorities	n=5 (2 %)
Don't know what archaeologists are doing now; Whatever archaeologists decide to do/what needs to be done most; Focus on transportation; Focus on sensational/provocative; Focus on specific local social issue; Focus on important sites/projects; Focus on early Euro-Americans; Something new/different/unstudied	n ≤ 4 (≤ 1.6 %)

Appendix M Statement of Informed Consent (for all interviewees)

*The Portland State University
Consent to Participate in Research*

Can Community Engagement in the Local Past and Systematic Archaeology be Mutually Beneficial? A Case Study in Community Archaeology from Sauvie Island, Oregon
3.7.2016

Introduction

You are being asked to participate in a research study that is being done by Shelby Anderson, who is the Principal Investigator, and Martin Plumer, from the Department of Anthropology at Portland State University in Portland, Oregon . This research is studying the experience of doing community archaeology.

You are being asked to participate in this study because your thoughts and feelings, especially about your experience(s) doing community archaeology, will be extremely valuable in A) better understanding the impacts of community science/archaeology on those involved, and B) designing similar projects in the future.

This form will explain the research study, and will also explain the possible risks as well as the possible benefits to you. We encourage you to talk with your family and friends before you decide to take part in this research study. If you have any questions, please ask one of the study investigators.

What will happen if I decide to participate?

If you agree to participate, the following things will happen:

1) Participants taking part in archaeological fieldwork will meet on Sauvie Island for a day of archaeological survey. Professional archaeologist participants will help to lead the instruction sessions and fieldwork, and non-professional (public) participants will serve as crew members. For more information about the archaeological portion of the project please contact Martin Plumer (contact information below). Additionally, all participants in the archaeological fieldwork will be interviewed via phone both before AND after fieldwork. These interviews will last approximately 30 minutes and will primarily discuss the participant's thoughts and feelings about archaeology, science, and their fieldwork experience.

2) Participants not taking part in archaeological fieldwork will be interview once via phone. This interview will last approximately 30 minutes and will primarily discuss the participant's thoughts and feelings about community archaeology and working with the public.

How long will I be in this study?

Participation in this study will take a total of approximately 9 hours over a period of 1 to 2 weeks for those taking part in archaeological fieldwork, and approximately 30 minutes for those not taking part in archaeological fieldwork.

What are the risks or side effects of being in this study?

There are risks of stress, emotional distress, inconvenience and possible loss of privacy and confidentiality associated with participating in a research study.

For more information about risks and discomforts, ask the investigator.

What are the benefits to being in this study?

Non-professional participants in the archaeological fieldwork portion of the project will get a unique opportunity to work with professional archaeologists in pursuit of actual scientific objectives. There is a good chance of encountering or discovering archaeological materials during fieldwork, and participants will be able to work hands-on to document such resources. Professional archaeologist participants will get a rare chance to apply their leadership and teaching abilities in conducting archaeological survey with members of the public. All participants will have substantial opportunity to give extremely valuable opinions and feedback about community archaeology and their experience. No monetary compensation or other financial benefits will be distributed to participants.

How will my information be kept confidential?

We will take measures to protect the security of all your personal information, but we cannot guarantee confidentiality of all study data. Your participation in this project is confidential, and no information collected or presented in this research will identify you. All identifiable data will be coded for confidentiality and stored in a locked, secure place on the Portland State University's campus. Any coding master list will be kept separately from coded information. All information contained in the final write-up of this project will be 100% anonymous.

Information contained in your study records is used by study staff. The Portland State University Institutional Review Board (IRB) that oversees human subject research and/or other entities may be permitted to access your records, and there may be times when we are required by law to share your information. It is the investigator's legal obligation to report child abuse, child neglect, elder abuse, harm to self or others or any life-threatening situation to the appropriate authorities, and; therefore, your confidentiality will not be maintained.

Your name will not be used in any published reports about this study.

Will I be paid for taking part in this study? No

Can I stop being in the study once I begin?

Your participation in this study is completely voluntary. You have the right to choose not to participate or to withdraw your participation at any point in this study without penalty or loss of benefits to which you are otherwise entitled.

Whom can I call with questions or complaints about this study?

If you have any questions, concerns or complaints at any time about the research study, Martin Plumer or his associates will be glad to answer them at (215)-715-3701, or by email: plum2@pdx.edu.

If you need to contact someone after business hours or on weekends, please call Martin at the above number.

Whom can I call with questions about my rights as a research participant?

If you have questions regarding your rights as a research participant, you may call the PSU Office for Research Integrity at (503) 725-2227 or 1(877) 480-4400. The ORI is the office that supports the PSU Institutional Review Board (IRB). The IRB is a group of people from PSU and the community who provide independent oversight of safety and ethical issues related to research involving human participants. For more information, you may also access the IRB website at <https://sites.google.com/a/pdx.edu/research/integrity>.

CONSENT

You are making a decision whether to participate in this study. Your signature below indicates that you have read the information provided (or the information was read to you). By signing this consent form, you are not waiving any of your legal rights as a research participant.

You have had an opportunity to ask questions and all questions have been answered to your satisfaction. By signing this consent form, you agree to participate in this study. A copy of this consent form will be provided to you.

Name of Adult Subject (print)	Signature of Adult Subject	Date
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INVESTIGATOR SIGNATURE

This research study has been explained to the participant and all of his/her questions have been answered. The participant understands the information described in this consent form and freely consents to participate.

Name of Investigator/ Research Team Member (type or print)

(Signature of Investigator/ Research Team Member)	Date
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Appendix N Informed Consent Script (for all survey respondents)

Title of Study: *Can Community Engagement in the Local Past and Systematic Archaeology be Mutually Beneficial? A Case Study from Sauvie Island, Oregon.*

You are being invited to participate in a research study about community archaeology. This study is being conducted by Martin Plumer (graduate student) and Shelby Anderson (advising professor), from the Department of Anthropology at Portland State University for Martin Plumer's master's thesis.

There are no known risks if you decide to participate in this research study. There are no costs to you for participating in the study. The information you provide will help the investigators to understand what Portland-area adults know and think about science, archaeology, and the past. The questionnaire will take about 5 to 10 minutes to complete. The information collected may not benefit you directly, but the information learned in this study should provide more general benefits.

This survey is anonymous. No one will be able to identify you or your answers, and no one will know whether or not you participated in the study. Individuals from the Institutional Review Board may inspect these records. Should the data be published, no individual information will be disclosed.

Your participation in this study is voluntary. By completing , you are voluntarily agreeing to participate. You are free to decline to answer any particular question you do not wish to answer for any reason.

If you have any questions about the study, please contact Martin Plumer (plum2@pdx.edu; 215-715-3701) or Shelby Anderson (ashelby@pdx.edu; 503-725-3318), Anthropology Department, Portland State University, P.O. Box 751, Portland, OR 97207.

The Portland State University Institutional Review Board has reviewed this project. If you have any concerns about your rights in this study, please contact the PSU Office of Research Integrity at (503) 725-2227 or email hsrrc@pdx.edu.