



## (Not) Just Another Isolated Historic Refuse Scatter

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**Abstract** Historic refuse scatters often appear to lack research potential, particularly when they occur in isolated settings. Yet, those initial impressions can be misleading. This article considers a refuse dump (CA-SMA-368/H) found in a remote location along the shore of San Francisco Bay. Analysis revealed the deposit was located on the extensive grounds of the Carnduff Farm and was deposited shortly after the death of the family matriarch. As a reflection of that household transition, the assemblage has rich interpretive value, underscoring the need for more deliberate and conscientious assessments of such seemingly unimportant resources.

**Resumen** El desecho histórico dispersa son a menudo parece faltar potencial de investigación, especialmente cuando ellos ocurren en ajustes aislados. Todavía, éstos inicialan impresiones pueden estar descaminando. Este artículo considera un basural (CA-SMA-368/H) encontró en una ubicación remota por la costa de la Bahía de San Francisco. El análisis reveló que el depósito fue situado en el motivo extenso de la Granja de Carnduff y fue depositado poco después la muerte de una matriarca familiar. Cuando una reflejo de esa transición de la casa, la colección resultó al havecontained valor que interpreta rico, subrayando la necesidad para la evaluación más deliberada y concienzuda de tales recursos aparentemente poco importantes.

**Historic refuse** deposited at some distance from its place of creation is often presumed to have minimal research value. That dismissal is typically based on the difficulty of defining specific associations for such secondary deposits. To use Deetz's (1996:128) term, such resources often seem to possess limited "focus," a concept that acknowledges the variable temporal and cultural specificity of their associations. Focus aptly captures the interdependence of contextual specificity and interpretive scale.

More detailed interpretations are possible when more precise associations are known, but important archaeological interpretations are still possible at even the broadest scales. As many investigators have pointed out, secondary (off-site) refuse deposits with associations at the community or neighborhood level also warrant investigation as expressions of the evolution of consumer behavior within a capitalist world system (Deetz 1991:7; McIlroy 1994:250-252; Yentsch 1993). However, few have undertaken that research because it entails sampling at such broad scales.

The most noteworthy example of a broad scale investigation is the Tucson garbage project (Rathje 1975; Rathje and Murphy 1992), a long-term study used to test archaeological middle range theories and to reveal differences between reported and actual disposal behavior at the scale of an entire city. The Tucson garbage study produced many insights that contradicted expectations, including such counterintuitive findings as the production of more food waste per capita during periods of stress (i.e., economic recessions).

When associations are narrowed to neighborhoods or to more specific types of donor communities, interpretations can be further refined. For example, dumps associated with work camps and military forts provide assemblage profiles that are valuable as comparative data (e.g., Holman and Associates 1999; Jones and Stokes Inc. 2001; Van Bueren 2002). A more ambitious analysis of a community dump in Skagway, Alaska by Blee (1991) sought to discriminate the respective assemblage profiles for household, commercial, and military donors using multiple regression analysis. Yet, broad scale studies of consumer behavior remain rare, in part because they require careful accumulation of detailed comparative data.

The temporal specificity of a secondary refuse deposit also clearly influences its interpretive value. Dumps used for brief periods of time or containing many discrete fill contexts are more likely to have analytic value than mixed deposits created over longer periods. Narrowly dated deposits afford opportunities to compare consumer behavior across time, while broadly dated ones blur such distinctions. This principle has been used to justify the legal significance of closely dated community dumps in places like San Diego (Van Wormer 1988) and Salt Lake City (Mike Polk, personal communication 2001), while others used over longer periods and containing temporally mixed deposits have been judged as lacking

the research value necessary to qualify them as significant or eligible for listing as historical resources and/or historic properties (e.g., Fisher and Van Bueren 1995; Scantlebury and Van Bueren 2002; Tordoff 1989; Van Bueren 2002).

This article explores why it is important to assess carefully the temporal focus and specificity of associations for secondary refuse deposits. An unassuming surface scatter of historic materials found near the shore of San Francisco Bay is explored as a case study. That site, designated CA-SMA-368/H, contained a surface scatter of historic artifacts reflecting a broad time range that at first seemed to lack clearly defined associations. However, careful integration of historical research and analysis of the assemblage contents resulted in a completely different conclusion. The seemingly innocuous assemblage instead arguably reflects a one-time disposal event that took place shortly after the death of the matriarch of the Carnduff family around 1917. The following presentation highlights the difficulties inherent in defining associations, as well as the interpretive power of transitional events as windows into generational changes and the negotiation of power within households over extended periods of time.

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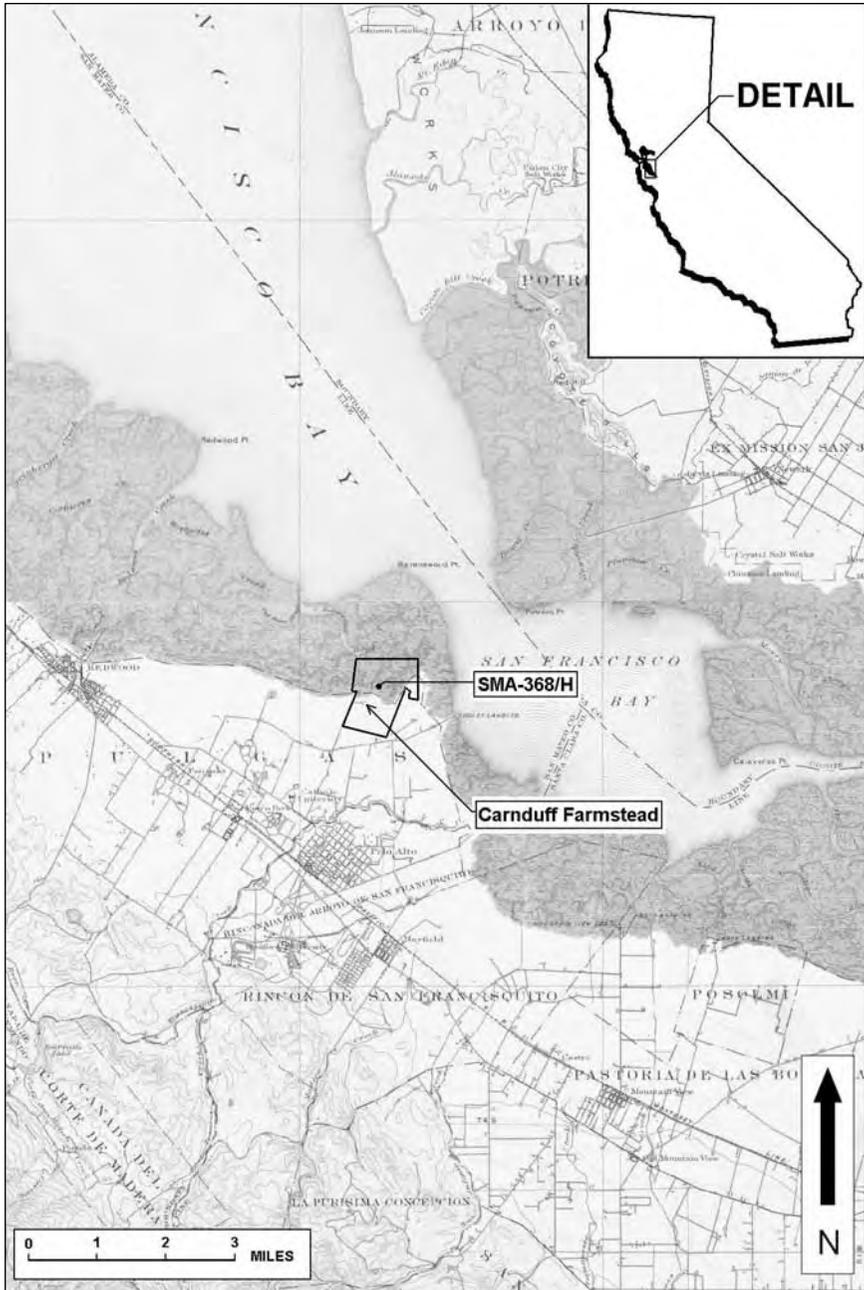
### **Establishing a Plausible Association**

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A surface scatter of historic refuse, shell, and flaked stone materials was discovered in 2002 during a wetland restoration project near Menlo Park in southern San Mateo County, California (Figure 1). It was recorded as site CA-SMA-368/H, a resource with both prehistoric and historic components. The site is located near the margin of San Francisco Bay next to a former meander of Ravenswood Slough. Investigations of the historic component were reported by Van Bueren (2004), while studies focused on the prehistoric component were reported by Fitzgerald (2005).

The first question for the historic component of the site was: who deposited the material? Bay shore dumping was commonplace in the late nineteenth and twentieth centuries, influenced in part by evolving knowledge of disease trajectories, a desire to address unsanitary conditions in urban centers, and the changing economic value of garbage over time (Melosi 1981, 2000; Miller 2000). As Louis Pasteur's germ theory of disease gradually replaced early concepts of "miasmas," greater emphasis was placed on removing refuse to the outskirts of cities or dumping it offshore.

Much of the waste stream before the turn of the nineteenth century was, in fact, reused or recycled, with food waste often sold as livestock feed, manure used as an agricultural product, and some unwanted materials resold as secondhand goods or made into new items. As Perry (1978:15) observed, "Competition was fierce and aggressive between the independent scavenger entrepreneurs" in the Bay Area prior



**Figure 1.** 1899 USGS Hayward and Palo Alto quadrangles showing the Carnduff Farmstead and CA-SMA-368/H.

to World War I. That pattern eventually gave way to the formation of the first scavenging cooperative in San Francisco in 1920, a development that foreshadowed the growth of the organized corporate recycling enterprises that are common today.

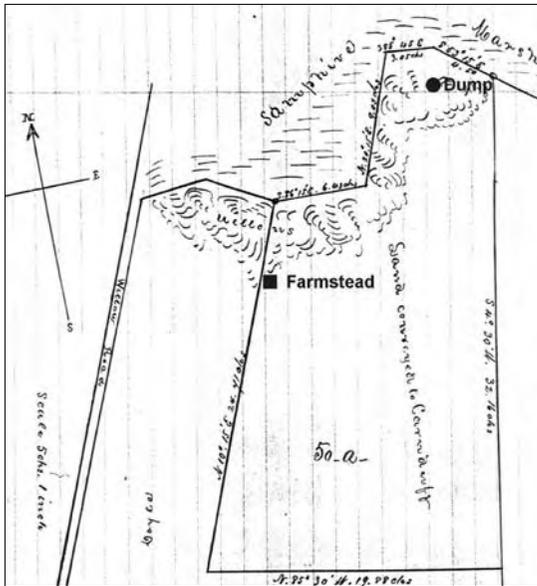
The bay shore was initially considered an opportune place to dispose of residual urban wastes. Not only were marshlands poorly suited for development, but tidal fluctuations and marine organisms helped wash away, decompose, and bury those discarded materials (Yentsch 1993). Later, that disposal practice was supplanted in places like the San Francisco Bay Area and New York City by offshore dumping or transfer to dedicated landfills (Van Bueren 2002). By 1941, offshore garbage disposal via barges was taking place in the Bay Area (Hyde et al. 1941).

Secondary refuse disposal was thus common in settings such as that found at CA-SMA-368/H. However, the relatively limited size of the deposit and the range of historic materials found in it suggested that the donor was likely a single household rather than an entire neighborhood or community. In addition, the local area was relatively sparsely populated and access to this disposal site was limited in comparison to other nearby segments of the bay shore. Research was therefore conducted to determine whether the marshlands around the discovery site were privately owned and, if not, who lived in the nearest habitations. Those proximate residents and landowners were clearly the most plausible donors.

That research found that the CA-SMA-368/H dump lay within the extensive grounds of a farm established in the mid-1860s and occupied by the same family until 1947. Irish immigrant Samuel Carnduff initially purchased 50 acres that encompassed the location of the dump, using proceeds acquired through gold mining in 1865 (San Mateo County Deeds [6:81-83], Figure 2). That parcel became the core area of the Carnduff farm. The farm residence and other buildings were erected on the highest ground, a location that contained a prehistoric shell midden. That midden later came to be known as the Hiller Mound (CA-SMA-160/H; Cartier 1996).

The Carnduff farmstead was established on a portion of the vast Rancho de las Pulgas land grant conferred to Maria de Soledad de Arguello and other heirs in 1857. It passed through the hands of several land speculators before Samuel Carnduff purchased the unimproved land for \$2,500. It is unlikely that any prior settlement took place on the property. Within two years of acquiring the property, Carnduff bought 23.6 acres of arable land adjoining the farm to the west, as well as over 100 acres of salt marshes to the north (San Mateo County Deeds [6:247-249]). That additional land brought the total acreage of the farm to about 180 acres. The title was not perfected until the 1870s, however (San Mateo County [Patents 1:139-140]; San Mateo County [Deeds 6:453 and 10:454-456]; [Swamp and Overflow Land Surveys 1:112]; [Tideland Surveys 1:39]).

The property surrounding the CA-SMA-368/H historic refuse scatter was un-



**Figure 2.** Annotated deed map of Carnduff Farm in 1865 prior to expansion of the farm.

developed land prior to its acquisition by Samuel Carnduff. It lay just within the vast Rancho de las Pulgas land grant and included marshlands along the shore of San Francisco Bay. Those marshlands were bought ostensibly to create a shipping wharf, but L. P. Cooley constructed a wharf with better shipping access at Ravenswood before Carnduff could develop one. There is no evidence that he ever built a competing facility. According to Samuel's great-grandson (Stanley F. Carnduff, personal communication 2002), the only known uses of the marshlands surrounding CA-SMA-368/H were for fishing and launching the family's small skiff.

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### Assessing the Period of Deposition

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The Carnduff dump (CA-SMA-368/H) contained a minimum of 560 historic artifacts, as well as a few structural items, ecofacts, and bulk materials not itemized in the minimum number of individual specimens (MNI) count listed in Table 1. Materials in the dump were extensively fragmented, with only a handful of intact objects. The dump was essentially a surface scatter, although some materials were recovered as deep as 12 inches below the surface. The shallow burial of some historic materials is likely explained by periodic tidal inundations which continued until the modern highway eventually limited such flooding episodes. Surface and buried materials were collected separately; however, hundreds of cross mends suggest that the assemblage effectively represents a single undifferentiated depositional event.

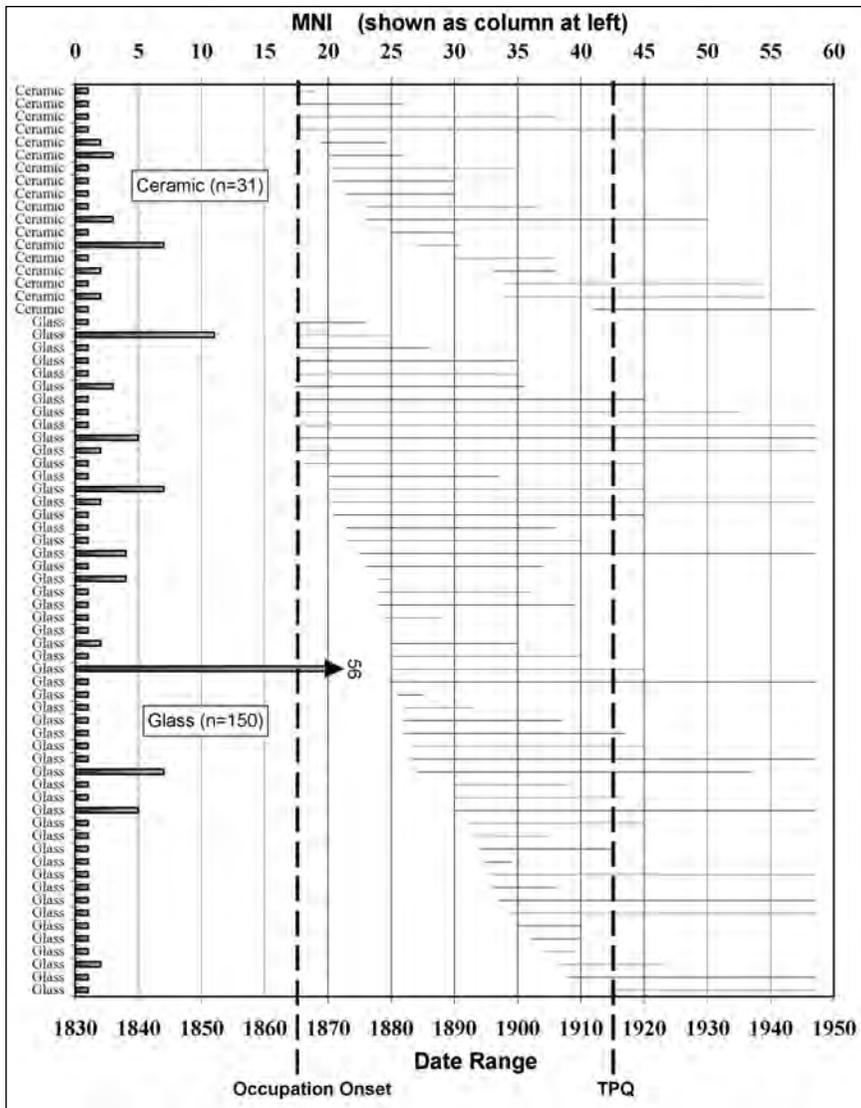


Figure 3. Date ranges for temporally diagnostic items adjusted for occupation onset.

The production periods for artifacts in the collection span a nominal range from the onset of farm occupation in 1865 to 1915 (Figure 3). Four specimens made prior to occupation of the farm are consistent with heirlooms discarded after occupation commenced. Manufacture of the most recent item in the assemblage began in 1915, but because the dump was not capped that *terminus post quem*

remains imprecise. In other words, deposition could have continued for some time after that date due to a variety of factors. The suggested date range made it tempting to conclude that the CA-SMA-368/H dump accumulated gradually over more than five decades of farm occupation, a finding that would therefore indicate that the assemblage lacked the potential to illuminate diachronic changes in household consumption patterns. However, the absence of materials postdating 1915 provided a clue that proved crucial for this analysis.

That date closely coincides with the time the farm passed to William Carnduff after more than 50 years under the control of the patriarch Samuel and his widow Anne. Between Samuel's death in 1884 and Anne's demise in 1917, William Carnduff married and raised a large family on the farm. That family history is briefly summarized here because it provides important contextual clues that prompted reassessment of the CA-SMA-368/H assemblage. The following details are drawn from Van Bueren (2004) which contains a more comprehensive account.

**Table 1.** Historic Materials from CA-SMA-368/H by Type and MNI.\*

Group	Category	Type	Count	MNI
Activities	Gardening	Containers	7	2
		Indefinite	2	1
		Glue Bottle	1	1
	Sewing	Fabric Seal	1	1
	Smithing	Anvil	1	1
	Tools	Eye Hook	1	1
	Writing	Containers	15	4
Activities Subtotal			28	11
Domestic	Household	Clothes Iron	1	1
		Food	81	27
	Food Prep/ Consumption	Shoulder Seal <sup>1</sup>	1	1
		Stopper	1	1
		Drinking Vessels	26	11
		Indefinite	139	13
		Kitchen	102	16
		Serving	479	67
		Tableware	146	47
	Food Storage	Closures	4	2
		Containers	176	34
		Beverage Storage	2	1
	Furnishings	Clock	1	1
		Decorative Items	133	14
		Handle	1	1
		Mirror	2	1
	Heating/ Lighting	Coal	3	65 g
		Lamps	17	8
	Indefinite	Closure	1	1
		Containers	8	3
Decorative Items		7	3	
Indefinite		663	29	
Domestic Subtotal			1994	282

**Table 1.** Historic Materials from CA-SMA-368/H by Type and MNI.\* (continued)

Group	Category	Type	Count	MNI
Faunal	Bones	Animal	92	0
	Shells	Shellfish	33	0
Faunal Subtotal			125	0
Floral	Seed	Seed	1	0
Floral Subtotal			1	0
Indefinite	Indefinite	Closures	2	2
		Containers	416	145
		Indefinite	341	18
Indefinite Subtotal			759	165
Industrial	Machinery	Mold	3	1
		Dial <sup>2</sup>	1	1
Industrial Subtotal			4	2
Personal	Clothing	Closures	3	3
		Fasteners	3	2
		Leather	2	1
	Grooming/ Health	Containers	96	41
		Container w/ closure	3	1
	Indefinite	Container	2	1
	Social Drugs	Alcohol Containers	231	44
Personal Subtotal			340	93
Structural	Electric	Wiring	1	1
	Hardware	Fastener	1	1
	Indefinite	Indefinite	6	4
	Materials	Mortar	1	28 g
		Roofing	5	0
		Sewer Pipe	27	0
		Window Glass	33	0.3 kg
		Roof Tile	8	0.2 kg
Structural Subtotal			82	6

\*Counts combine fragments and intact items for all contexts. Weights are given in place of a MNI for bulk materials, if known; <sup>1</sup>Glass container with an embossed shoulder seal; <sup>2</sup>Readout gauge from unidentified piece of machinery.

### A Brief History of the Carnduff Family

Samuel Carnduff was born in Ireland in 1816 and immigrated to the United States sometime before 1851. In that year, his eldest son Samuel was born to his first wife in Missouri, likely while they were traveling to California (United States Census Office 1870). By the time the couple's second son, Henry, was born in 1856, the family was reportedly living in California (Detlefs 1996:17). It may be that Samuel's first wife died giving birth to Henry, although no record of her death has been found.

In 1862, Carnduff and his sons moved to Ravenswood and leased land from Anna Woods for farming (Foss 1942:22). He apparently married his second wife, Anne McClure, prior to 1868, but no record of the marriage could be located. Anne (also known as Anna) was born in Ireland in 1830 to Irish parents and the couple's only son, William Andrew Carnduff, was born in 1869 when she was 39 years old. The 1870 U.S. population census lists members of the household as Samuel Carnduff, age

52 and a farmer; Anna, age 40, listed as “keeping house;” Samuel, Jr., age 19, born in Missouri; Mary A., age 17, born in California; Henry, age 14, born in California; and William A., age 1, born in California; and a boarding farm laborer named John Nelson who was 26 years old and married.

The 1880 federal population census reveals that the Carnduff family was reduced to Samuel, his wife Anne, and their son William A., by then 11 years old and attending school. Samuel’s children from his first marriage all lived elsewhere by that time. Daughter Mary Anne Carnduff married Patrick A. Harrington prior to 1880 and tragically died October 17 of that year in San Francisco, having had no children (San Francisco Call, October 20, 1880). In 1884, Henry lived in San Luis Obispo, and Samuel Jr., his wife, and two children lived in San Francisco.

On April 17, 1884, the patriarch Samuel Carnduff died of a stroke after several months of illness (Foss 1942:23). Further compounding the family tragedy, Samuel Jr. died just over a month later on May 20, 1884, at the age of 33 in San Francisco (San Mateo Times, May 20, 1884). Those deaths caused substantial hardship, as the operation of the farm was left solely to his wife Anne, then 54 years old, and the couple’s 15 year-old son William. There is no evidence that Henry Carnduff ever returned to the farm, a fact that suggests estrangement possibly precipitated by issues concerning the inheritance of the family farm.

While the farm was productive under Samuel Sr.’s control, as indicated in assessments and federal agricultural census records, subsequent economic hardship is implied by the fact that Anne Carnduff took out a loan of \$4,000 from John C. Edgar during settlement of her husband’s estate (San Mateo County [Mortgages 18:97]). It bore interest at the then exorbitant rate of 9% per year. On August 13, 1885, more than a year after Samuel passed away, the farm, its improvements, and furniture went to Anne at the close of probate (San Mateo County [Deeds 38:355]). After retiring the mortgage on May 3, 1890, the Carnduffs never again borrowed money against the property.

Meanwhile, the couple’s only son, William A. Carnduff, married Catherine Whitehill Archer in 1889. Catherine was born on September 3, 1868, and immigrated to the United States from Edinburgh, Scotland, at the age of 19 (Van Bueren 2004). Eleven years later, the 1900 U.S. population census indicates that the Carnduff household was comprised of William and Catherine (Kate); their children, Wilbert (age 10), Edgar (age 8), Fred (age 7), Janet (age 4), and Samuel (later known as Chester and then under one year old); and William’s mother, Anne. Fred was the first to marry and move off the farm in 1916.

Anne McClure Carnduff died on September 18, 1917, at the age of 87 (San Mateo County [Index to Deaths 5:142]). Most of her estate passed to her only son William at the close of probate on September 26, 1918 (San Mateo County

[Deeds 275:338]). However, she also bequeathed \$1,000 to each of her five surviving grandchildren. After paying those proceeds, William A. Carnduff was left with \$3,345.92 in cash. A tax assessment for the year 1919 reveals that an automobile had been acquired by the family by that time. The following year, the Carnduff household consisted of William and Catherine, Wilbert (listed as a farmer on the home farm), Jeanette (listed as a bank clerk), and Chester (Samuel).

### Contemplating Household Transitions

When combined with the timing of Anne’s death, the absence of artifacts postdating 1915 posed new questions for the analysis of the CA-SMA-368/H dump. Was it possible that the deposit reflected a one-time household disposal event around the time William inherited the farm property rather than five decades of steady household deposition? If so, how could that scenario be distinguished from repetitive discard events over a longer period?

Differences in the dating of glass and ceramic artifacts were first scrutinized (Table 2). Glass dates in the Carnduff dump are significantly later than the ceramics, with a mean terminal date for glass of 1909. According to Adams (2003), glass and ceramic use-lives did not significantly diverge in this manner until the onset of mechanized glass production around 1900. Prior to that time, both types of materials often remained in circulation for up to 35 years or longer. Figure 4 provides

**Table 2.** Summary of Dating Statistics.\*

Statistic	Glass	Ceramic
Mean	1897	1891
Standard deviation of mean	14.1	16.1
Mean terminal date	1918	1903

\*Ceramic date range excludes one curated item.

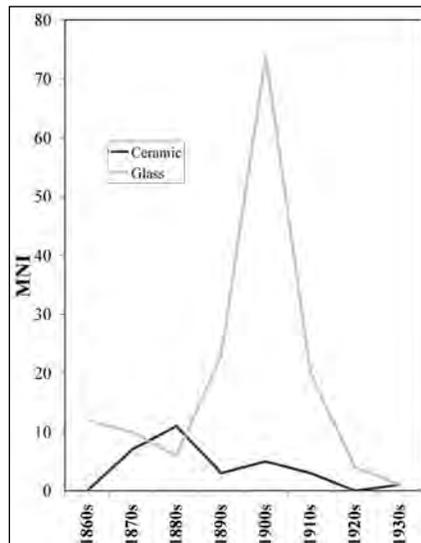


Figure 4. Comparison of glass and ceramic mean dates adjusted for occupation onset.

another way to visualize the divergence of mean dates in the Carnduff dump. The crucial consideration for this assemblage is that a greater amount of early glass would be expected if the assemblage accumulated gradually. Instead, over 85% of the glass was likely produced after 1900 and most of the earlier glass containers are types such as canning jars that were well suited for reuse. Another example is the presence of early soda bottles, which were likely reused to store root beer made from scratch using extract bottles also present in the assemblage.

The selective composition of the assemblage also added weight to the one-time disposal scenario. Instead of containing materials associated with the entire family, the content is skewed in unique ways. It is particularly significant, for example, that no artifacts such as toys, clothing, or footwear attributable to William and Kate's five children are present. The absence of items generally associated with men is also potentially significant, although gender attributions for artifacts must be regarded with caution for reasons discussed by Brashler (1991), Casella (2000) and Knapp (1998), among others. The deposit also diverges from expectations for routine household disposal in that it contains few faunal remains or food containers.

To better understand the CA-SMA-368/H historic dump, the assemblage was compared with 18 other sampled Irish households from urban and rural contexts (Tables 3 and 4). Those comparisons analyze selected classes of material recovered from discrete features representing three rural Irish households from northern California, as well as 15 urban households from Oakland. With one exception, those comparative assemblages came from privies. They are broken down by period and urban versus rural contexts to highlight differences, which are expressed in each case as percentages of the total MNI.

The CA-SMA-368/H dump had unusually high numbers of food preparation and consumption vessels. These included many unique serving wares that were likely retained as treasured parlor decorations. In addition, storage wares were also found in high numbers suggesting an emphasis on home production. The ceramics contained many mismatched and long out of fashion serving and table wares that were likely heirlooms that Anne had acquired prior to her husband's death. For example, transfer prints are very common (Figure 5). Their discard implies wholesale replacement that is consistent with differences in period and generational fashion preferences. As such, their discard in this dump reinforces the likely one-time disposal scenario following Anne's death.

The only personal items found in abundance in the CA-SMA-368/H assemblage are alcoholic beverage and medicine bottles. The medicines could plausibly be linked to the aging Anne Carnduff. They included many alcoholic and narcotic preparations, including a Coca Mariana wine bottle that contained cocaine as an

**Table 3.** Comparison of Selected Artifacts among Irish Households in Northern California.

Name	Deposit Date	Location	Feature	Percentages of Total MNI*							Total MNI*
				Food	Food Prep./ Consumption	Food Storage	Alcohol	Grooming/ Health	Clothing		
Bass	1928	LAS-1756	A4	11.0	21.5	7.6	1.7	5.2	10.5	172	
Carnduff	1915	SMA-368/H	1	7.5	39.8	9.6	11.4	10.9	1.8	387	
Sanderson	1900s	AMA-364	3	7.5	21.7	5.0	5.0	5.0	8.3	120	
Brady	1902	Oakland	968	5.8	19.3	3.9	2.6	13.5	2.9	311	
Kinsella	1900	Oakland	1317	3.2	24.6	0.0	7.1	6.3	10.3	127	
O'Brien	1900	Oakland	300	2.2	21.5	4.4	6.1	3.3	11.1	181	
O'Brien	1900	Oakland	2870	3.3	46.2	7.0	8.1	8.1	1.1	359	
Haggarty	1890	MNT-1382/H	A&B	6.1	20.3	2.7	7.4	6.1	27.0	148	
Fallon	1890	Oakland	1454	3.3	33.3	2.7	5.3	10.7	4.0	150	
Barry	1887	Oakland	4234	4.0	15.6	1.6	3.2	12.5	13.2	377	
McDonald	1880s	Oakland	3178	3.1	31.4	1.9	8.8	8.2	11.9	159	
Murray	1880s	Oakland	3185	5.4	27.6	3.2	4.1	12.2	10.8	221	
(Irish renter)	1880s	Oakland	4648	2.4	29.5	1.2	3.6	7.2	21.7	166	
Donovan	1880	Oakland	947	5.2	20.0	5.8	4.5	5.2	18.1	155	
Irving	1880	Oakland	955	2.4	17.8	0.6	1.8	5.5	28.8	326	
McLaughlin	1880	Oakland	2822	2.4	22.8	0.4	3.2	10.0	21.4	499	
Quinn	1880	Oakland	3830	3.5	17.7	0.0	26.5	7.1	8.0	113	
Corrigan	1880	Oakland	4245	1.6	23.6	0.0	7.1	7.1	7.1	127	
McNammarra	1880	Oakland	4724	3.6	17.5	0.0	10.8	10.8	22.7	194	

\*Excludes structural materials, faunal remains, and unidentified items. See text for sources.

**Table 4.** Analysis of Variation from Table 3.

Mean Proportion of Assemblages	Food	Food Prep/ Consumption	Food Storage	Alcohol	Grooming/ Health	Clothing
Carnduff	7.5	39.8	9.6	11.4	10.9	1.8
All households (n = 18)	4.4	24.8	3.0	6.8	8.2	12.7
Agrarian (n = 3)	8.0	25.8	6.2	6.4	6.8	11.9
Urban (n = 15)	3.4	24.6	2.2	6.9	8.5	12.9
All post-1900 (n = 7)	5.8	27.8	5.4	6.0	7.5	6.6
All pre-1900 (n = 11)	3.6	23.1	1.7	7.2	8.6	16.2



**Figure 5.** Transfer printed ceramic table and serving wares from CA-SMA-368/H. (Photograph by the Anthropological Studies Center at Sonoma State University).

ingredient. The attribution of alcoholic health products to Anne is, of course, speculative and must be considered in the larger context of the evidence discussed here. However, her use of those products is generally consistent with Rorabaugh's (1979:12-13) observation that women, who were supposed to be the moral guardians of the home, may have been forced to imbibe covertly.

Alcoholic beverages are represented in the Carnduff assemblage in nearly twice the proportion found in other Irish households. While there is a modest but significant decrease in alcohol use over time in other households, the proportion in the Carnduff assemblage is higher than average. If the deposit was created in 1918 around the time of Anne's death, those materials could possibly reflect drinking associated with her wake.

Apart from the personal items, the assemblage is dominated by materials reflecting the public aspects of life in the household that Anne controlled. However, there are also indications of a house renovation event that may dovetail with the replacement of antiquated furnishings and the purchase of a new automobile after William inherited the farm. Pieces of ceramic sewer pipe and electrical wiring suggest that household amenities were either installed or upgraded around the

time the dump was created. These renovations indicate changes in the Carnduff residence happened to coincide with a new approach to management of the farm property. For example, William began leasing land to Chinese farmers, according to the 1920 federal population census.

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### **The Interpretive Value of Household Transitions**

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Collectively, the available contextual clues and archaeological evidence seem to strongly support the one-time disposal scenario. Looking more closely at the dated artifacts by period, a pattern of more opulent spending characterizes the period before Samuel's death in 1884. The more expensive porcelains and the limited collection of food and nonalcoholic beverage containers all date to that period. Those early extravagances gave way to a much more austere pattern of spending when the household came under Anne's exclusive control. The ceramics purchased during her tenure include many mismatched wares of diverse patterns, suggesting piecemeal or even secondhand acquisitions. Those mismatched wares would have conveyed lower status to visitors.

Decorative ceramic and pressed glass pieces in the assemblage are also quite eclectic and ornate. These kinds of materials were roundly decried by fashion setters even prior to the turn of the 19th century as cluttered, gaudy, cheap, pretentious, and inefficient. By the 1890s, many middle class Americans rejected Gilded Age fashions and adopted a style of decor that favored simplicity, efficiency, and naturalness (Cohen 1986:275). The wholesale disposal of such items is thus consistent with expectations for a renovation event where the beloved trappings of one generation were viewed with disdain by the next.

Home production was also emphasized. Purchased food products, including canned goods, are completely absent, although that may simply be a reflection of the selective character of the assemblage. Food storage containers such as crocks and canning jars are abundant. There is also evidence of the production of non-alcoholic beverages, a demijohn consistent with home wine or beer production, and the purchase of bulk cloth for sewing projects indicated by a bolt seal. The only real luxuries purchased during Anne's reign as the head of the household are alcoholic beverages and health and grooming products consisting mainly of patent medicines.

Ultimately, Anne's thrifty spending was not a product of poverty, however. Instead, it appears to have sprung from philosophical inclination. While she did take out a mortgage in the period following her husband's death, that note was successfully retired within five years. William's marriage and the arrival of five children also placed new demands of the family's income, yet assessments for the farm

**Table 5.** Assessments for Carnduff Farm at Selected Dates.\*

Year	Acres	Value (\$)	Improvements (\$)	Personal Property	Total Value (\$)
1870	73.0	3,650.00	Not separated	\$350: 8 horses (\$240); 5 cows (\$35); 12 chickens (\$20); wagon (\$25); reaper (\$30)	4,000.00
1880	73.0	4,380.00	1000.00	\$550 total: furniture (\$20); sewing machine (\$15); farm utensils (\$50); farm machinery (\$30); three wagons (\$40); five horses (\$170); three cows (\$60); two calves (\$1); two mules (\$100); hogs (\$10)	5,930.00
	136.0	270.00	None		270.00
1890	73.0	7,300.00	700.00	\$490 total	8,490.00
1900	73.2	6,000.00	500.00	\$300 total: furniture (\$50); machinery (\$20); wagons (\$30); four horses (\$50); harness (\$10); two cows (\$40)	6,800.00
	140.0	200.00	None		200.00
1910	56.2	6,000.00	500.00	\$260 total: machinery (\$20); wagon (\$30); harness (\$10); four horses (\$150); two cows (\$50)	6,760.00
	139.0	600.00	None		600.00
1918	56.2	7,500.00	500.00	Crop \$250; autos \$300; personal property \$250	9,500.00
	139.0	1,250.00	None		

\*Derived from San Mateo County Assessments for the indicated years.

consistently grew, amounting to \$9,500 in value the year after her death (Table 5). In addition, her probate reveals that \$8,346 in cash was distributed to her heirs.

Household spending practices clearly shifted after Anne's death. In addition to the purchase of a car and upgrades of sewer and electrical amenities, it can be deduced that all of those discarded food preparation and consumption wares were likely replaced. Together, these facts suggest a fairly extensive facelift of the domestic sphere. It is also intriguing that materials in the dump were highly fragmentary and were located far from the house. This hints at purposeful breakage and a symbolic distancing from Anne's values and practices. If that conjecture is valid, this assemblage could reflect a rejection of values such as frugality and outmoded tastes, as well as covert alcoholic beverage consumption. Indeed, the changes promulgated by the succeeding generation suggest that William and his wife Kate may have chafed under her matriarchal rule.

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## Conclusion

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The historic dump at CA-SMA-368/H underscores the importance of carefully integrating historical and physical data when evaluating secondary historic trash deposits. What initially appeared to be a deposit lacking temporal focus and clear associations was instead reassessed as representing a one-time disposal event with considerable interpretive value. Few secondary refuse scatters are likely to possess the high interpretive value associated with the CA-SMA-368/H assemblage. However, this case study hopefully reinforces the notion that care should be taken to investigate associations and consider the timing and content of such dumps when evaluating their research importance. This study also underscores the interpretive value of transitional events as reflections of intergenerational dynamics. In many cases it appears that change often takes place episodically as power is transferred from one generation to the next.

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## References Cited

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- Adams, William H.  
2003 Dating Historical Sites: The Importance of Understanding Time Lag in the Acquisition, Curation, Use, and Disposal of Artifacts. *Historical Archaeology* 37:38–64.
- Blee, Catherine H.  
1991 *Sorting Functionally Mixed Artifact Assemblages with Multiple Regression: A Comparative Study in Historical Archaeology*. Unpublished Ph.D. Dissertation, University of Colorado, Boulder.
- Brashler, Janet G.  
1991 When Daddy Was a Shanty Boy: The Role of Gender in the Organization of the Logging Industry in Highland West Virginia. *Historical Archaeology* 25:55–68.
- Cartier, Robert (editor)  
1996 *The Hiller Site: CA-SMA-160 Archaeological Burial Recovery Program, Willow Park VIII in the City of Menlo Park*. Report on file at Archaeological Resource Management, San Jose. Copies available at the California Historic Resources Information System, Northwest Information Center, California State University, Sonoma.
- Casella, Eleanor  
2000 Bulldaggers and Gentle Ladies: Archaeological Approaches to Female Homosexuality in Convict-Era Australia. In *Archaeologies of Sexuality*, Robert A. Schmidt and Barbara L. Voss, editors, pp. 143–159. Routledge, London and New York.

Cohen, Lisabeth A.

- 1986 *Embellishing a Life of Labor: An Interpretation of the Material Culture of American Working Class Homes*. In *Common Places*, edited by Dell Upton and John Michael Vlach, pp. 261–280. University of Georgia Press, Athens.

Deetz, James

- 1991 *Archaeological Evidence of Sixteenth and Seventeenth Century Encounters*. In *Historical Archaeology in Global Perspective*, edited by L. Falk, pp. 1–9. Smithsonian Institution Press, Washington.

- 1996 *In Small Things Forgotten: An Archaeology of Early American Life*. Anchor Books, New York.

Detlefs, Charlene

- 1996 *Historical Background of the Hiller Mound*. In *The Hiller Site: CA-SMA-160 Archaeological Burial Recovery Program, Willow Park VIII in the City of Menlo Park*, edited by Robert Cartier, pp. 16–18. Archaeological Resource Management, San Jose. Copies available at the California Historic Resources Information System, Northwest Information Center, California State University, Sonoma.

Fisher, Jim, and Thad M. Van Bueren

- 1995 *Historical Study Report for the Oakdale Bypass Project, Stanislaus County, California*. California Department of Transportation, District 10, Stockton. Copies available at the California Historic Resources Information System, Central California Information Center, California State University, Sacramento.

Fitzgerald, Richard T.

- 2005 *Archaeological Investigations at CA-SMA-368/H for the Ravenswood Biological Mitigation Project, 04-SMA-84, PM 41.9/47.1 EA 04-015113, San Mateo County, California*. California Department of Transportation, Oakland. Copies available at the California Historic Resources Information System, Northwest Information Center, California State University, Sonoma.

Foss, Werner C., Jr.

- 1942 *The History of Ravenswood*. San Mateo Junior College student research paper, on file at San Mateo County History Museum Archives, Redwood City.

Holman and Associates

- 1999 *Research Design for Identification, Evaluation, and Data Recovery of Historic Archaeological Resources, Crissy Field Restoration Project, Presidio of San Francisco, Golden Gate National Recreation Area*. Submitted to the National Park Service, San Francisco. Copies available at the California Historic Resources Information System, Northwest Information Center, California State University, Sonoma.

Hyde, Charles, Harold F. Gray, and A. M. Rawn

- 1941 *Report upon the Collection, Treatment, and Disposal of Sewage and Industrial Wastes of the East Bay Cities, California*. Submitted to the City of Berkeley. Copies available at the California Historic Resources Information System, Northwest Information Center, California State University, Sonoma.

Jones and Stokes Inc.

- 2001 *Archaeological Survey Report/Historical Study Report, Doyle Drive Corridor Project, Presidio of San Francisco National Historic Landmark District, City and County of San Francisco, California*. Submitted to the California Department of Transportation, District 4, Oakland. Copies available at the California Historic Resources Information System, Northwest Information Center, California State University, Sonoma.

Knapp, A. Bernard

- 1998 *Boys will Be Boys: Masculinist Approaches to a Gendered Archaeology*. In *Reading in Archaeological Theory: Post Processual and Cognitive Approaches*, David S. Whitley, editor, pp. 240–249. Routledge, London and New York.

McIlroy, Jack

- 1994 Theme E: Waste Disposal – Dumps. In *West Oakland, “A Place to Start From”—Research Design and Treatment Plan: Cypress I–880 Replacement Project, Volume I: Historical Archaeology*, edited by Mary Praetzellis, pp. 250–252. Submitted to the California Department of Transportation, District 4, Oakland. Copies available at the California Historic Resources Information System, Northwest Information Center, California State University, Sonoma.

Melosi, Martin V.

- 1981 *Garbage in Cities: Refuse, Reform, and the Environment, 1880–1980*. Texas A&M University Press, College Station.
- 2000 *The Sanitary City: Urban Infrastructure in America from Colonial Times to the Present*. John Hopkins University Press, Baltimore.

Miller, Benjamin

- 2000 *Fat of the Land: Garbage in New York—The Last Two Hundred Years*. Publishers Group West, New York.

Perry, Stewart E.

- 1978 *San Francisco Scavengers: Dirty Work and the Pride of Ownership*. University of California Press, Berkeley.

Rathje, William L.

- 1975 In Praise of Archaeology: Le Project du Garbage. In *Historical Archaeology and the Importance of Material Things*, edited by Leland Ferguson, pp. 36–42. Society for Historical Archaeology Special Publication Series 2.

Rathje, William L., and Cullen Murphy

- 1992 *Rubbish! The Archaeology of Garbage*. Harper Collins, New York.

Rorabaugh, W. J.

- 1979 *The Alcoholic Republic: An American Tradition*. Oxford University Press, Oxford, England.

San Francisco Call

- 1880 Edition published on October 20, page Y. San Francisco.

San Mateo County

- n.d. Assessments, Deeds, Index to Deaths, Mortgages, Patents, Swamp and Overflow Land Surveys, and Tideland Surveys (from various dates cited in text). County Recorder's Office, Redwood City.

San Mateo Times

- 1884 Edition published on May 20. San Mateo.

Scantlebury, Meg, and Thad M. Van Bueren

- 2002 *Historical Resources Evaluation Report for the Ashby Avenue/I–80 Interchange Reconstruction Project in the Cities of Berkeley and Emeryville*. California Department of Transportation, Oakland. Copies available at the California Historic Resources Information System, Northwest Information Center, California State University, Sonoma.

Tordoff, Judy

- 1989 *Historical Resource Evaluation Report for the I–280/King Street Touchdown Ramp Project, San Francisco, California*. California Department of Transportation, District 4, San Francisco. Copies available at the California Historic Resources Information System, Northwest Information Center, California State University, Sonoma.

## United States Census Office

n.d. Manuscript population census records. Washington, DC.

## Van Bueren, Thad M.

- 2002 *Archaeological Investigations for the Glass Beach Remediation Project in Fort Bragg, California*. Submitted to the Mendocino Land Trust, Mendocino. Copies available at the California Historic Resources Information System, Northwest Information Center, California State University, Sonoma.
- 2004 *Contemplating Household Transitions Investigations at the Carnduff Farm (CA-SMA-368/H) in San Mateo County California*. California Department of Transportation, Oakland. Copies available at the California Historic Resources Information System, Northwest Information Center, California State University, Sonoma.

## Van Bueren, Thad M. (editor)

2002 Communities Defined by Work: Life in Western Work Camps. *Historical Archaeology* 36(3).

## Van Wormer, Stephen R.

- 1988 *Even the Kitchen Sink: Archaeological Investigations of SDi-10,258, the 1908 to 1913 San Diego City Dump*. Submitted to W. Wolf Industries, Inc., San Diego. Copies available at the California Historic Resources Information System, South Coastal Information Center, California State University, San Diego.

## Yentsch, Anne E.

- 1993 Working with Fill in San Francisco. In *Tar Flat, Rincon Hill, and the Shore of Mission Bay: Archaeological Research Design and Treatment Plan for SF-480 Terminal Separation Rebuild*, Volume 2, edited by Mary and Adrian Praetzelis, pp. 331–348. Submitted to the California Department of Transportation, Oakland. Copies available at the California Historic Resources Information System, Northwest Information Center, California State University, Sonoma.