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# American Material Culture: Investigating a World War II Trash Dump

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*“The past is given new dimensions by studying the small things so often forgotten...objects so plain they would never be displayed in a museum”. – James Deetz*

Historical archaeologists love trash, the older the better. One such trash dump lies relatively untouched on the Department of Energy’s Idaho National Laboratory (INL). The U.S. military dumped its trash in dry irrigation canals during and after their World War II activities and shortly before the federal government designated this arid and desolate place as the nation’s nuclear reactor testing station in 1949. When read critically and combined with memories, photographs, and other documents, the 60-year old trash provides a glimpse into 1940s’ culture and the everyday lives of ordinary people who lived and worked during this time on Idaho’s desert.

The story begins in the fall of 1942. After months of rumors and speculation, the U.S. Navy opened the Naval Ordnance Plant two miles north of Pocatello. Here they manufactured, assembled, and repaired a wide variety of weapons and ammunition. The size of ordnance ranged from light caliber to sixteen-inch guns. However, before being sent from this dry, inland locale onto Navy battleships, the ordnance first had to be test fired to ensure its accuracy and dependability. The dangers associated with test firing, called proofing, required an isolated, relatively flat area with gravelly soil and no outcrops or other obstructions that could cause shells to ricochet. After inspecting several possible test sites, Naval Commander J. A. Scoville selected a long, narrow stretch of sand and sagebrush approximately sixty miles northwest of Pocatello and seventeen miles northeast of Arco. After site selection, the Navy quickly commenced building the proving ground, one of only six in the country and the only one used to test fire the Pacific Fleet’s “Big Guns” (U.S. DOE, 2005; Arco Advertiser, 1942 and 1946).

By the end of 1942 the war with Japan was accelerating and the Navy had no time to waste in getting weapons into battle. Construction workers and equipment soon swarmed over

the once deserted and barren land. By the following summer, Navy officers, civilian workers and their families, and Marines with guard dogs had arrived at the site. The Navy called it the Arco Naval Proving Ground, later shortened to the NPG (Wyle Laboratories, p.1-1, 2-5).

On November 11, 1943, the Navy celebrated Armistice Day and the NPG's formal opening by inviting curious local town folks to a special program. Although the nearly eighty-thousand acre firing range was off-limits, dozens of visitors toured the southern portion of the NPG. The tour included two separate sectors that together covered a little over two hundred acres. The northern-most "Proofing Area" was the business end of the NPG. It consisted of a railroad spur and 250-ton gantry crane that civilian workers used to unload ordnance after its arrival by rail from the Pocatello Plant. The area also included an office building, rows of wooden and concrete gun mounts, earthen and concrete munitions bunkers, and a fire control tower that sat atop a heavily reinforced eight-foot wide concussion wall. The wall served to protect the men and women, known as Women Ordnance Workers (WOWs), who loaded and fired the weapons (Arco Advertiser, 1943).

On the south side of the concussion wall and about a half mile away from the Proofing Area was the "Residential Area" where military and civilian workers and their children lived. The area contained solid, red brick bungalows that served as officers' quarters, matching red brick barracks for the Marine guards, and a cinderblock commissary that residents called simply "the store" (Stacy, p. 11).

At first, unlike the Navy officers and Marine guards, most civilian workers and their families lived in communities around the NPG. However, rough roads and severe winters made the drive to the NPG treacherous. This danger, combined with the scarcity of available housing, led the Navy to build their own houses and barracks on the isolated base. Some residents lived at

the NPG until 1949 when the Navy transferred the site to the newly formed Atomic Energy Commission, leaving behind shell casings, empty buildings, and piles of garbage to prove they were there (Stacy, pp. 11-15).

Some of the homes and other NPG buildings and structures were reused by the Atomic Energy Commission's nascent nuclear reactor program that was intended to maximize the use of the atom for military and peaceful uses. However, nearly fifty years would pass before another thought was given to their garbage or the lives and culture it represented. For example, the trash dump's location revealed clues to society's attitude about the environment during the 1940s. Although the trash dump lies just off the main highway between Idaho Falls and Arco, passers-by would never know it was there.

As evidenced by the scattered debris, the NPG cleanup crews apparently backed up to an old, dry irrigation canal and shoveled the trash into it. The gently undulating terrain and large sagebrush concealed debris that missed the canal. Unless one accidentally stumbled across it, the existence of the dump would have remained unknown. However, the dump's location was not accidental and illustrates the "out-of-sight, out-of-mind" mentality about refuse that existed at the time. Unlike today, the military did not even attempt to cover the trash with soil, leaving it exposed to the elements but hidden from human view.

Like the casual passers-by, INL archaeologists were unaware of the dump or its origins until the early 1990s. It was then that an INL project manager called them about the need to clean it up. They jumped at the chance to examine the then mysterious debris and determine where it had come from and who might have left it.

The near absence of industrial waste and the wide variety of household items indicated that the trash had probably not come from the INL's scientific activities. Although the depth of

the trash varied, in some places exceeding three feet, it extended for well over a mile. The sheer volume of garbage and its uneven distribution suggested that whoever had dumped the trash had made several trips to the same canal, perhaps regularly over an extended period of time. Some of the garbage also appeared to have been intentionally set afire perhaps in a misguided effort to destroy it. However, most of the discarded items remained intact though charred and missing paper labels.

Given its relatively close proximity to the former NPG Residential Area, investigating archaeologists assumed that the trash originated there but still had to prove it. A cursory inspection of several of the artifacts allowed them to be dated. Diagnostic features, such as the structure, composition, and openings of cans, manufacturer trademarks, inclusions in glass bottles, and patterns on china, allowed archaeologists to narrow the dates of the dump to between 1920 and 1960. Knowing the INL area had been closed to the general public and their garbage since 1949 helped to narrow the dates even further.

Archaeologists and a professional historian continued the investigation by searching libraries, newspaper archives, and federal records for information about the NPG. Although the information was scattered and often vague, they did find documents that detailed the size and kind of ordnance tested, the results of many of these tests, and descriptions of the Residential and Proofing areas' infrastructure. However, other than mentioning the commanding officers' names, official reports said nothing about the people who had left the trash. Fortunately, it was soon learned that some of the NPG alumni had stayed in Southeastern Idaho and, over the years, told stories punctuated with shows of old photographs. The stories described life on the NPG base, often told by people who were just children during World War II.

During subsequent visits to the dump, excitement grew as individual items were identified that supported the stories about the Proving Ground's social activities and residents. For example, the Navy threw fairly wild parties at this area where the government had long ago prohibited the possession of all alcohol. One story recalled Saturday nights when the NPG engineer drove a locomotive, used to move ordnance, from its shed and talented local musicians played the latest tunes while couples danced and drank the night away. Predictably, after a few hours and many drinks, punches were thrown and the on-duty Marine guards had to break up the fights. The substantial quantity of heavy crown-top beer cans lining the dump lent credence, at least to the first part of this story (Anselmo, 1997).

A toy riding train and baby doll buggy brought to mind another story also involving trouble and the Marine guards but this time the culprits were much younger members of the NPG community. It seems that, while riding the school bus the seventeen miles each way to and from Arco, a few of the restless boys bullied the younger children. In typical military fashion, the Navy stationed a Marine guard to ride the bus to and from school which effectively took care of the problem (Stacy, p. 12).

Old photographs showed a semi-circle of the now nonexistent small, white frame houses the Navy had built. Barely visible in the backyards of many of these tidy homes, appeared gardens. The women who lived at the NPG had apparently tried to make the isolated and barren desert seem more like a friendly small town than a wartime Naval base. They raised and displayed flowers in the once-bright red, yellow, and blue pots and vases that were strewn throughout the dump. To supplement their families' bland diets the women planted, canned, and served fruits and vegetables from the backyard gardens as evidenced by their now-grown children's fond memories and the dump's bent pressure cooker, broken Mason jars, and fragile,

floral patterned crockery pieces. These items lay scattered randomly among the ubiquitous tin cans and bottles that spoke volumes about the NPG's tasteless, military-supplied food. The unmistakable cobalt-blue Milk of Magnesia bottles and glass fragments shone majestically against a backdrop of blackened ketchup bottles and rusted bean and meat cans. Other medicine bottles, including some normally associated with headaches, also languished nearby as, perhaps, reminders of the rowdy Saturday night get-togethers (Anselmo, 1997).

Thanks to priceless stories, hours of research, and historical archaeologists' ability to read the language of artifacts, the dump turned from just another trash heap in need of being cleaned up into a treasure trove of 1940s memorabilia worthy of keeping. Such studies of "those small things often forgotten" serve to fire imaginations, enrich understanding of past practices, and humanize history. Historical archaeology provides opportunities to integrate inanimate objects with animated narrative and, the more recent the artifacts, the more human the stories they can tell. The study of the INL World War II trash dump provided an opportunity to combine archaeology and history to vividly portray unique events from Idaho's more recent past and to commemorate events and persons who might otherwise also have been forgotten (Hodder, p. 217).

## Bibliography

Anselmo, Al, Personal communication with author, September 12, 1997.

Hodder, Ian. ed. Archaeological Theory Today. Cambridge, UK: Polity Publishers, 2001.

Deetz, James. In Small Things Forgotten: An Archaeology of Early American Life. 2<sup>nd</sup> edition. New York: Bantam Doubleday Dell Publishing Group, Inc., 1996.

---. "Navy Man Says Site Near Arco Chosen As Range." Arco Advertiser. 2 October 1942.

---. "Armistice Day At Gun Range." Arco Advertiser. 5 November 1943.

---. "Size Of Ordnance Plant Still Surprises Visitors." Arco Advertiser. 16 January 1946.

Stacy, Susan M. Proving the Principle: A History of the Idaho National Engineering and Environmental Laboratory, 1949-1999. Washington, D.C.: Government Printing Office, 2000.

U.S. Department of Energy, Idaho National Laboratory Cultural Resource Management Plan. DOE/ID-10997, rev. 1. Idaho Falls: U.S. Department of Energy, 2005.

Wyle Laboratories. Interim Ordnance Cleanup Program: Record Search Report. Idaho Falls: U.S. Department of Energy, 1993.