

ARTICLE

Top Shot: Recreational and Military Firearms of Fort Boise, Idaho

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Abstract

Multiple archaeological investigations on the grounds of Fort Boise, Idaho (1863-1913), now the site of the Boise Veterans Administration, recovered over 1,500 munitions related artifacts. Analysis of two assemblages, one from a historic dump and the other from Fort Boise's Surgeons Quarters, indicates technological development of the United States Army from the Civil War to the years just before the First World War. The munitions recovered also identify the use of recreational firearms at Fort Boise, which was a popular pastime on the post. Munitions recovered from domestic contexts, such as the Surgeons Quarters, also suggest children were instructed on firearm use and etiquette.

KEYWORDS; Historical Archaeology, Munitions, Military Life, Boise, Idaho

Introduction

Munitions related artifacts recovered from two contexts on Fort Boise, Idaho (1863-1913), now the site of the Boise Veterans Administration, evidences both military and recreational firearm use. Despite largely pertaining to military firearms development from the Civil War to the eve of the First World War, the munitions assemblage also evidences recreational activities of Fort Boise's occupants. Oral tradition held that target practice was a popular pastime of Fort Boise with several cartridges and bullets indicating said pastime. Munitions recovered from a domestic context, such as the Surgeons Quarters, also suggests children were instructed on firearm use and etiquette pertaining to both recreational and military rounds.

History of Fort Boise

Fort Boise was founded on July 4, 1863 by Oregon and Washington Volunteers along the Oregon Trail in the Boise River Valley. The primary purpose of Fort Boise was to guard the Oregon Trail, aid in law enforcement, and protect the mining camps (Ferris 1971:124). Despite a growing military presence in the West, violent confrontations between settlers and Native Americans continued and eventually led to several open conflicts; the first, and longest, of these conflicts was the four-yearlong Snake War (1864-1868). Military efforts stalled at the start of the Snake War necessitating command and structural changes that resulted in famed fighter General George Crook being brought to the region and Fort Boise being designated as a military district. Upon arrival, Crook immediately set out on a hard-hitting winter campaign in 1866, resulting in a shift of the primary conflict to what is now eastern Oregon. Crook's tactics were effective, and by January of 1867 the military district of Fort Boise was discontinued; the following year the Snake War would come to an end and calls to close Fort Boise began (NPS 1971:124). Fort Boise was not closed and continued as a staging point for the regions' other conflicts offering supplies and troops in the Nez Perce War of 1877, the Bannock War of 1878, the Sheepeater Campaign of 1879, and the labor wars of the 1890s in Northern Idaho (NPS 1971:125).

Despite its military exploits, Fort Boise endured in large part because of its close connections to the community and the city of Boise. Officers, enlisted men, and their families contributed heavily to Boise's social life, hosting a myriad of parties, parades, musical acts, and recreational competitions (Schwantes 1991:171). When not engaged with the rigors of patrolling the frontier enlisted men and officers alike engaged in several activities. Officers often found excuses to throw parties, so much so that one enlisted man remarked they always had "Something new to keep the whiskey running," (Hilleary et al. 1965:154). Fort Boise came to mean home for the many families that accompanied officers and enlisted men throughout the West. Children of the post were often roving about the military reservation and beyond. Family events were often at the center, or cause, of celebration; on February 17, 1878, Emily Fitzgerald, wife of post surgeon John Fitzgerald, recalled her daughter's birthday party in which all the children of the Fort Boise gathered and devoured the cake, proceeding to have a regular spree (Fitzgerald and Laufe 1962:325). Domestic life at Fort Boise would continue to provide regular sprees until its inactivation as a post. After its inactivation in 1913, the grounds passed into the hands of the Public Health Service. In 1938 the former grounds of Fort Boise passed hands again to the Veterans' Administration (NPS 1971:125). The former grounds of Fort Boise continue to serve under the Veterans Administration to this day.

Archaeology of Fort Boise

Over the past 40 years there have been roughly a dozen archaeological investigations on the former grounds of Fort Boise with the most recent being in 2016 (Campbell et al. 2017). The projects have varied in length and scope (see Campbell et al 2017:16-20 for a summary of the projects). Most have been short term projects; however, the cumulative result is a large collection (approximately 40 boxes of artifacts) of excavated materials from the fort in state repositories.

The dozen or so excavations have resulted in a significant collection of materials reflecting life at the fort. For the purposes of this investigation the data is drawn from two projects. The first project was a survey and limited testing of two historic dumps associated with Fort Boise; One dump, 10AA112, was held to be the earliest dump of Fort Boise while the other, 10AA113, was believed to date around the early 1900s (Davis 1988). The assemblages recovered held ceramics, glass, and

military accoutrements and a significant collection of munitions artifacts. The second collection comes from a 2014 excavation of Fort Boise's Surgeons Quarters. The excavation was a week-long project associated with the renovation of the front porch and resulted in the recovery of approximately 3,500 artifacts associated with domestic life at a military fort. Of relevance for this paper were the 48 munition artifacts recovered as part of the excavations. As will be discussed, the evidence from this excavation indicates that recreational firearm uses, and education was a domestic activity of the Surgeons Quarters occupants.

Munitions

The munitions assemblages were largely the result of the U.S. Army in the late nineteenth century. The assemblages demonstrate changes in caliber size, cartridges, and weapons following the Civil War. Overall, the munitions represent military training actions on the fort, but a portion of the assemblage also represents recreational firearm use on the site. One hundred and five projectiles were recovered from the dump and while most were related to the military, several rounds reflect non-military activities of Fort Boise.

Principles of firearms identification, analysis, and nomenclature help to differentiate between military and recreational rounds. Analysis of munitions includes markings on cartridges or bullets, measurements of bullet or cartridge diameter, and identification of cartridge type (Mathews 1962). For the late nineteenth century U.S. Army, identification of firearms type is discernable based on bullet and cartridge caliber. Variations in cartridge size, typically denoted by short and long categories, represents the grams of gunpowder contained within the cartridge (Herskovitz 1978:50). Recreational rounds, while occasionally using similar caliber sizes to the military rounds, are defined in this assemblage as those identified as not being standard issue within the nineteenth and early twentieth century U.S. Army; meaning, all cartridges or bullets that were procured through personal means are included in this category. Nomenclature used will be discussed as necessary. Projectiles refers to any bullet that is discharged from a firearm, while cartridges are metallic cases designed to hold the primer, powder, and bullet (Suydam 1960:14). Sprue marks refer to the caste marks left on round ball projectiles. Rifling marks are those that appear on a projectile when fired from a gun barrel that is barreled with distinct grooves.

U.S. Army surplus from the Civil War is present on Fort Boise (Table 1). Thirteen .65-caliber round ball projectiles are the largest recovered. The .65 caliber round ball was the basic projectile employed by Federal and Confederate armies during the American Civil War (Geier et al. 2014:67). The ubiquitous .65 caliber round ball represents the earliest arms of Fort Boise and were likely supplied to the Oregon and Washington Volunteers who founded the fort (Schwantes 1991:116). Several years after the Civil War the .65 caliber round ball was still in use by the U.S. Army throughout the West as surplus dominated the early frontier army (McChristian 1995:7). Another projectile that was surplus from the Civil War is a .52 caliber bullet. The wildly popular, and reliable .52 caliber Sharps percussion rifle was used with some regularity by the U.S. Army for several years after the Civil War (McChristian 1995:7). Six land and groove impressions, left by rifling, present on the projectile indicate that this bullet was fired from a Sharps rifle dating to the early period of Fort Boise (Figure 1) (Carlson-Drexle et al. 2008:27). The distinct rifling pattern present on the .52 caliber projectile indicates that it was Civil War surplus used by the U.S. Army rather than for recreation.



Figure 1. .52 caliber bullet associated with a Sharps rifle, note the groove marks in the projectile.

Table 1. Projectiles from Fort Boise's Dump

| Caliber | Associated Firearm (s) | Count | Comments | Date Range | Reference |
|---------|---|-------|--|------------|---------------------------|
| .65 | Springfield Model 1842 | 13 | One with evident sprue mark | | Geier 2014:67. |
| .52 | Sharps Rifle | 1 | Rifling present | 1852-1902 | Greene and Scott 2004:129 |
| .45 | Model 1873 Springfield Rifle | 4 | All fired; One mushroomed; three distorted | 1873-1892 | Herskovitz 1978:46. |
| .45 | 45 Colt "Peacemaker" single-action revolver | 4 | One with evident rifling | 1873-1892 | Barnes 1997:271. |

Top Shot: Recreational and Military Firearms of Fort Boise, Idaho

| .45 | Ball | 8 | Sprue marks | | Herskovitz 1978:52. |
|---|--|----------|---|-----------|--------------------------------|
| .44 | Colt 1860 percussion revolver; Remington Model 1875 44 Army revolver | 1 | Oxidized | 1875-1892 | Barnes 1997:271. |
| .44 | | 4 | Oxidized | 1871-1873 | Barnes 1997:265. |
| .42 | | 1 | Flatnosed; Modern | | |
| .38 | 38 Short and Long Colt | 6 | Rifling evident on five | 1875-1911 | Barnes 1997:253. |
| .35 | | 1 | Impacted; too warped to indicate what it is | | |
| .30-03 or .30-40 Krag | M1892 Springfield or Model 1903 Springfield | 5 | Rifling apparent on all projectiles | 1903-1906 | Barnes 1997:107. |
| .30 | | 2 | | | |
| .30 | | 1 | Part of a Buck and Ball Load | | |
| .25 | | 3 | | | Barnes 1997:97. |
| Unknown Projectile fragments | | 51 | Fired; Impacted; Unidentifiable | Unknown | |

By 1873, the United States Army had transitioned from an army of surplus and adopted newer firearms. The .45 caliber projectile became the standard issue for revolvers and rifles and the caliber size would thrive for 19 years before being replaced (Barnes 1997:86). Four .45 caliber bullets illustrate the change and are associated with a Model 1873 Springfield rifle. One projectile mushroomed while the other three are distorted with some rifling present indicating all four have been shot. Four additional .45 caliber bullets were from a Colt "Peacemaker" single-action revolver; all four have been fired. The .45 Colt "Peacemaker" lasted 17 years after being adopted by the U.S. Army in 1875 (Barnes 1997:271). Eight .45 caliber balls recovered indicate the use of percussion pistols at the fort and are also likely Civil War surplus. Six of the eight .45 caliber balls have sprue marks (mold seems); four are heavily oxidized. The .45 caliber ball was widely used early in the nineteenth century continuing into and after the Civil War (Herskovitz 1978: 52). Four .44 caliber conical bullets are heavily oxidized

making further analysis impossible. It is possible, however, that these projectiles are associated with the Colt 1860 percussion revolver or the Remington 1875 Army revolver. The .44 caliber bullet was introduced in 1871 but its tenure ended quickly in 1873 in favor of the .45 caliber Colt (Barnes 1997:271).

Further developments in the United States Army are demonstrated by the six .38 Long and Short Colt projectiles recovered. Rifling on five of the projectiles indicates that they were fired. The sixth .38 caliber projectile has no discernable characteristics. The .38 Long and Short Colt was used by the U.S. Army from 1892 to 1911 (Barnes 1997:253). Other rounds from the assemblage that indicate change in military weapons on Fort Boise are five .30-03 or .30-40 Krag caliber projectiles. The .30-03 and .30-40 Krag were both replaced with the .30-06 round early in the twentieth century (Barnes 1997:107). One .30 caliber ball is part of a buck and ball load; this is likely a remnant of the Civil War and was used with the .65 caliber projectile (Figure 2). The .30 caliber ball is also a likely remnant of the Civil War and continued use until the 1880s and was used by the U.S. Army, in a .65 caliber buck and ball load, for hunting (McChristian 2007:173). Recreational activities are represented by three .25 caliber bullets; the .25 caliber bullets are associated with the Stevens Rifle Company and were developed during the 1890s (Barnes 1997:101).

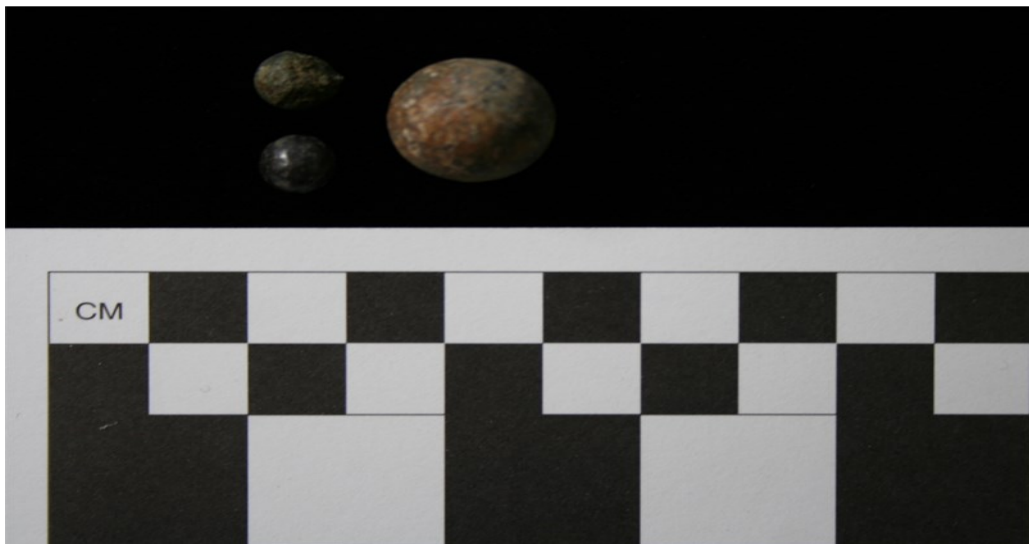


Figure 2. A buck and ball load; the two smaller balls on the left are .30 caliber ball while to the right is a .65 caliber ball.

Ninety-four cartridges were recovered that also demonstrate change in the military's use of firearms in addition to highlighting the personal firearms used by the forts denizens. Two .50 caliber cartridges fired from a Springfield Model 1866 exhibit pry marks indicate that the cartridges were jammed in the chamber and had to be physically extracted. Fourteen .45-70 cartridges are associated with a Springfield Model 1873 or a Springfield Model 1884; one cartridge has its projectile intact and a firing imprint on its primer cap indicating the cartridge misfired. Two .45-60 Winchester 1876 Centennial Model rifle cartridges were recovered with one lacking a firing imprint, indicating it was not fired, but was still missing a projectile. The Winchester 1876 Centennial Model rifle was introduced in 1879 and discontinued in 1897; the rifle was a popular amongst hunters, most famously Teddy Roosevelt (Barnes 1997:136). Two .45-55 cartridges fired from a Springfield Model 1873 Carbine were

recovered. Eleven .45 caliber cartridges that were recovered are associated with side arms. Five of these cartridges were fired from a .45 Colt, only one cartridge has a projectile intact, while six others are from a .45 Schofield or a Smith and Wesson revolver (Barnes 1997:170-171). These side arms were all military issued weapons and rounds.

Table 2. Fort Boise Military Reservation 10-AA-112 Cartridges

| Caliber | Associated Firearm (s) | Count | Comments | Date Range | References |
|----------------|--|--------------|---|--|---------------------------------------|
| .50 | Springfield Model 1866 | 2 | Both have pry or scratch marks | 1866-1873 | Barnes 1997:143. |
| .45-70 | Springfield Model 1873 or Springfield Model 1884 Rifle | 14 | One with projectile/misfired; | 1873-1892 | Barnes 1997:86. |
| .45-60 | Winchester 1876 Centennial Model rifle | 2 | One unfired but missing projectile | 1879-1897 | Barnes 1997:136. |
| .45-55 | Springfield Model 1873 Carbine | 2 | U.S. Military Round | 1873-1892 | Barnes 1997:86. |
| .45 | 45 Colt | 5 | One unfired but missing projectile | 1873-1892 | Barnes 1997:271 |
| .45 | .45 Schofield or Smith and Wesson | 6 | One unfired but missing projectile; one cartridge ruptured | 1875-1892 | Barnes 1997:270. |
| .44 | Henry and Winchester rifles | 12 | One with missing primer; blank and dummy round; used for demonstrating rifles ability | 1860s; uncommon after | Suydam 1960:97. |
| .44 | J.M. Marlin Ballard Sporting Rifle No. 2 | 8 | Long Ballard; centerfire; sporting | 1876; only available for a handful of years. | Suydam 1960:110. and Barnes 1997:130. |

Top Shot: Recreational and Military Firearms of Fort Boise, Idaho

| .41 | | 3 | Western Cartridge Company | 1908-1926 | Barber 1987 |
|----------------|-------------------------|----------|---|---|--------------------|
| .38 | Colt M1982 | 22 | 21 long; 1 short. Two misfired with projectile present; one unfired but missing projectile | 1875-1911 | Barnes 1997:253 |
| .32 | | 1 | Peters | | |
| .32-7.6 | | 1 | Remington | | |
| .30 | | 1 | | | |
| .30-03 | | 5 | Three made by Frankford Arsenal as indicated by head stamp. | 1900-1908 | Barnes 1997:54. |
| .30-06 | | 1 | Modern; recreational round | | Barnes 1997:55. |
| .25-35 | Remington Model 8 Rifle | 1 | | 1906-1940 | Barnes 1997:103 |
| .22 | | 2 | 1 short and 1 long; | 1885-1920 | Barber 1987:48 |
| 9mm | Lugar | 2 | Modern | 1985 | Barnes 1997:251 |
| 12 | Shotgun | 5 | 4 short and 1 long; Two W.R.C.A. Co./Rival produced between 1870s-early 1900s; One Winchester—likely the earliest; One U.M.C.Co. 12 Nitro Club—Modern; One S.R.A. & Co. | 1870s-early 1900s; some post-date military occupation | Herskovitz 1978:51 |

Twelve .44 caliber cartridges are associated with Henry or Winchester rifles; one of these cartridges is missing a primer but all twelve are dummy, or blank, rounds. These .44 caliber rounds were common in the 1860s and used to demonstrate the capability of the rifle but were uncommon after this period (Suydam 1960:97). Eight .44 caliber cartridges are associated with recreational firearms use of Fort Boise. The eight .44 caliber cartridges were made for use in a J.M. Marlin Ballard Sporting Rifle No. 2; all cartridges are centerfire and internally primed (Figure 3). Developed in 1876 for sporting purposes the cartridge was only available for a handful of years (Barnes 1997:130; Suydam 1960:110). The J.M. Marlin Ballard Rifle No. 2 was undoubtedly an individual's personal firearm and not a military issued weapon.



Figure 3. .44 caliber cartridges used with a J.M. Ballard Sporting Rifle No. 2.

The largest assemblage of cartridges recovered from Fort Boise's dump were 22 .38 caliber Short and Long Colt cartridges. Twenty-one recovered are short, indicated a smaller load of gunpowder, and one is a long, indicated a larger amount of gunpowder. The 38 Short and Long Colt is associated with the Colt M1892 produced and used in the U.S. Army between 1892 and 1908 (Barnes 1997:253). The 38 Short and Long Colt represent the later period of Fort Boise as the army transitioned from using a .45 caliber round.

Other cartridges recovered during excavations evidence recreational or hunting activities. One .25-35 caliber cartridge is associated with a Remington Model 8 Rifle which was in production between 1906 and 1940 (Barnes 1997:103). The .25-35 cartridge is likely from the later period of the fort, or even from the period of transition from military post to hospital. Two .22 caliber cartridges recovered from the dump are also from Fort Boise's later period; one cartridge is a .22 short while the other is a .22 long. The .22 short has an impressed "H" as its head stamp indicating it was manufactured by the Remington Repeating Arms Company from 1867 to 1926 (Barber 1987:55). With an impressed "U" as its head stamp, the .22 long cartridge was manufactured by the Union Metallic Cartridge Company from 1867 to 1911 (Barber 1987:48). The .22 caliber short cartridge was fired from a Sub-Caliber adapter for a 1903 Springfield Gallery Rifle; this Sub-Caliber adapter left a distinct twin-rectangular firing imprint mark (Mathews 1962:667). Other .22 caliber cartridges, from the Surgeons Quarters exhibit the same firing imprints. These rounds were not military issued and were popular recreational rounds in both hunting and target practice.

Munitions Recovered From the 2014 Excavation of the Surgeons Quarters

In total, 48 projectiles and cartridges, both recreational and military, were recovered from the 2014 excavation of the Surgeons Quarters; while unsurprising due to the Surgeons Quarters being housed on a military fort, it is surprising because it was found amongst a domestic context. The excavations took place below the floorboards of the front porch of the Surgeons Quarters that housed the fort's surgeon and family. The presence of both military and recreational cartridges is the likely result of the activities of children on a military fort.

Table 3. 10-AA-161: Surgeons Quarters Projectiles

| Caliber | Associated Fire-arm (s) | Count | Comments | Date Range | References |
|-----------------|---|-------|---------------------------------|------------|---------------------|
| .45-70 | Model 1873 Springfield carbine | 2 | Extraction marks present on one | 1873-1892 | Barnes 1997:86. |
| Buckshot | Shotgun/ Foraging Gun | 1 | Large | | Herskovitz 1978:52. |
| Buckshot | Shotgun/ Foraging Gun | 9 | Small | | Herskovitz 1978:52. |
| .45 | Percussion Pistol | 3 | Ball; cast marks | | Herskovitz 1978:52. |
| .45 | Colt .45 and Smith and Wesson Schofield | 2 | | | Barnes 1997:271. |
| .22 | | 1 | Shot; impacted; too damaged | | |
| N/A | | 1 | Impacted; too damaged | | |

Nineteen projectiles were recovered and are largely associated with the late-nineteenth century frontier army. Two projectiles are .45-55 caliber bullets associated with a Model 1873 Springfield carbine (Herskovitz 1978:46). One of the .45-55 projectiles recovered has extraction marks on either side of the projectile's neck. Extraction marks, like those in Figure 4, occur on projectiles and cartridges that have become lodged, typically during firing, in the chamber of the barrel. The projectile or cartridge is removed from the weapon with tools, such as a shell extractor, or with a knife which leaves distinct markings on the round (McChristian 2007:211; Scott 2013:141).

**Figure 4. .45-70 caliber projectile with extraction marks.**

Buckshot represents the largest portion of recovered projectiles from the Surgeons Quarters; in total, ten buckshot balls were recovered. Buckshot is likely the result of domestic hunting activities. Before 1881 the U.S. Army had no policy of issuing shotguns with most being furnished by efforts of the post commander or individual officers; shotguns were not inherently for combat but to supplement food supplies through hunting while on campaign (McChristian 2007:173). Buckshot likely represents personal attempts to hunt and supply fresh game. Three .45 caliber balls recovered are heavily oxidized and likely represent Civil War surplus as they are associated with percussion pistols (Herskovitz 1978:52). Two .45 caliber conical bullets recovered are also associated with side arms. Given the shape of the .45 caliber projectiles they are associated with a Colt Single Action Army Revolver Model 1873 or a Smith and Wesson revolver; both of which were U.S. Army issued (Barnes 1997:271). Two other projectiles recovered are not identifiable; both projectiles are impact rounds, that have been shot and made flat from impact, and are too damaged for analysis.

The largest portion of the munitions assemblage from the Surgeons Quarters is comprised of cartridges with 33 recovered (Table 4). Five .45-55 caliber cartridges recovered are associated with the Model 1873 Springfield carbine. Four of the five have been fired with the fifth, a likely misfire, retaining its projectile. Eight .45 caliber cartridges recovered correlate with commonly issued side arms of the U.S. Army. All have been fired and are associated with the Colt Model Single Action Army Revolver Model 1873 or a Smith and Wesson Scofield revolver (Barnes 1997:271). One Colt automatic cartridge recovered dates to 1911; this cartridge is a solitary find likely a product of Fort Boise's later period. The Colt automatic cartridge was probably military issued as it was introduced by Colt-Browning in 1911 and was adopted by the United States military (Barnes 1997:269). Another side arm cartridge, one .38 caliber cartridge, recovered evidences changing technologies and armaments in the late frontier army. The adoption of the .38 caliber round highlights changes in the late-nineteenth century U.S. Army as the .45 caliber round, fired from a Colt Model Single Action Army Revolver Model 1873 or a Smith and Wesson Scofield revolver, to the Colt M1892 (Barnes 1997:253).

Two .38 caliber rimfire cartridges were popular recreational rounds used throughout the West before adoption by the U.S. Army (Suydam 1960: 82). These cartridges differ from the centerfire military round being distinctly rimfire. The .38 rimfire cartridge was used recreationally in revolvers or sporting rifles (Barnes 1997:386). The .38 caliber cartridge has an impressed "U" head stamp meaning it was manufactured by the Union Metallic Cartridge Corporation; this particular cartridge dates to the middle period (1870-1880) of Fort Boise (Barber 1987:48). Three 30-06 cartridges recovered also date to the early twentieth century and are associated with a Model 1903 Springfield service rifle (Barnes 1997:107). One of the 30-06 cartridge has a head stamp indicating it was made in May of 1910 by the Frankford Arsenal in Philadelphia, Pennsylvania; the other two cartridges are too oxidized for analysis.

Ten .22 caliber cartridges represent the largest portion of the cartridge assemblage and consequently are typically associated with recreational firearms use. Four of the .22 caliber cartridges lack any head stamp indicating that they are amongst the earliest manufactured (Barber 1987:1). Three are stamped with an impressed "H" meaning they were manufactured by the Winchester Repeating Arms Company. Two other cartridges are stamped with an impressed "R" indicating they were manufactured by the Robin Hood Ammunition Company from 1906 to 1915 (Barber 1987:69). One .22 caliber cartridge exploded and is too damaged for analysis. The .22 caliber cartridge was primarily developed for recreational purposes and not issued by the military (Suydam 1960:45).

Table 4. 10-AA-161: Surgeons Quarters Cartridge Cases.

| Caliber | Associated Firearm (s) | Count | Comments | Date Range | Reference |
|----------------|--|--------------|---|-------------------|------------------------------------|
| .45-55 | Model 1873 Springfield carbine | 5 | Four fired; one with projectile intact | 1873-1892 | Scott 2013:139 |
| .45 | Colt Single Action Army Revolver Model 1873 or Smith and Wesson Schofield revolver | 8 | All fired; seven Colt-Schofield, one Colt round. | 1873-1892 | Barnes 1997:271 |
| .44 | .44 Colt Auto | 1 | Fired; oxidized | Modern | Barnes 1997 |
| .38 | Colt M1893 | 1 | | 1875-1911 | Barnes 1997:253. |
| .38 | | 2 | Rimfire; Union Metallic Cartridge Company | 1867-1875 | Barber 1987:48. Barnes 1997:386 |
| 30-06 | Model 1903 Springfield service rifle | 3 | Heavy oxidation on two; one identified as Frankford Arsenal May 1910 | | Barnes 1997:57. |
| .22 | | 10 | Four without head stamp; three with impressed "H"; two with impressed "R"; one exploded | | Barber 1960 |

Several of the cartridges exhibit multiple firing imprints; all .22 caliber cartridges recovered are rimfire (cartridges primed with gunpowder in the rim) and cannot be re-primed. Firearms analysis of the .22 caliber cartridges with multiple firing imprints indicated that these cartridges were fired from a Sub-Caliber adapter for a 1903 Springfield Gallery Rifle. The Sub-Caliber adapter used in this model left dual rectangular firing imprints (Mathews 1969:667). One of the .22 caliber cartridges fired with the Sub-Caliber adapter for a 1903 Springfield Gallery Rifle have scratches present indicated that they were jammed and pried out (Figure 5). One .22 caliber cartridge had two sets of firing imprints from the Sub-Caliber adapter; the likely cause of the two sets was a misfire (Figure 6).



Figure 5. Rectangular firing imprints left on a .22 caliber cartridge by a Sub-Caliber Adapter for a 1903 Springfield Gallery Rifle; note the scratch marks on the cartridge head.

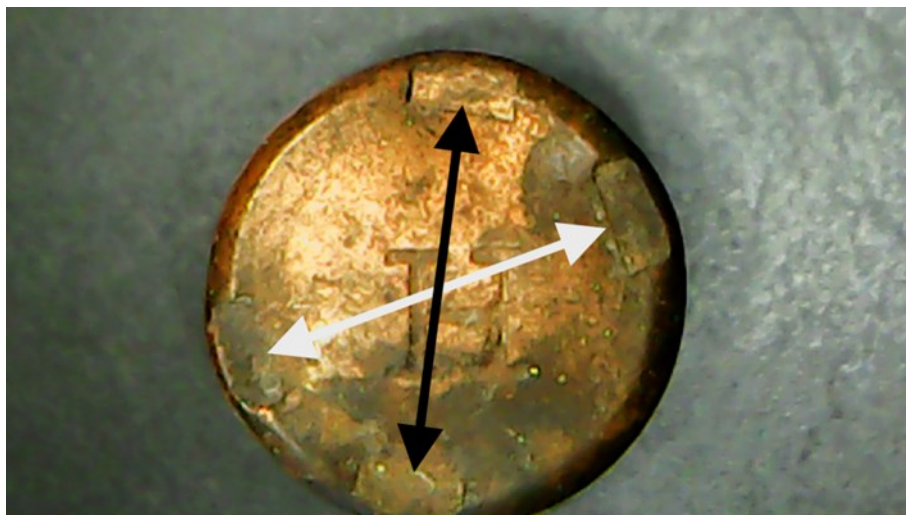


Figure 6. .22 caliber cartridge, note the correlating firing pin imprints (each color represents one set).

Conclusion

The diversity of the munitions present in the two assemblages demonstrates the changes in military armaments throughout the latter half of the nineteenth century. Fort Boise's early period is characterized by Civil War surplus that lasted until the 1870s when the U.S. Army began to overhaul its weaponry. Despite supply concerns stemming from its designation in 1879 as the Boise Barracks, the post was amply supplied with the latest arms tried and adopted by the U.S. Army. Supply of new firearms is indicated by the presence of multiple sidearm calibers; .44 caliber conical projectiles, introduced in 1871, were discontinued in 1873 in favor of a .45 caliber projectile which had a span of 17 years in the U.S. Army until being replaced by the 38 Short and Long Colt rounds (Barnes 1997:271). The turnover from surplus to consistently being armed with the most recent U.S. Army adopted sidearm demonstrates how Fort Boise consistently updated with firearms.

Military armament developments are present in the assemblage but what is equally revealing are the traces of domestic activities. Oral tradition held that target practice competitions were popular amongst the citizens of both the city and fort of Boise (ISHS Number 705). Several cartridges and projectiles from the dump site provide supporting evidence. Unique sporting arms, like the J.M. Ballard Sporting Rifle No. 2, were likely used in the popular activity. Recreational firearm use, unlike military firearm use, was inclusive, with women and children participating (Grover 1992:105). The presence of recreational firearms is representative of communal activities that included all inhabitants.

The Surgeons Quarters hosted several families before Fort Boise was deactivated as a military post in 1913. The munitions recovered during the excavation of the Surgeons Quarters indicated that household members regularly used guns for non-military activities. Children were likely instructed in the etiquette of firearms use as demonstrated by the diverse munitions assemblage recovered. Children were often exposed to situational learning defined by their social context (Baxter 2005:51). The social context of Fort Boise was defined by military and recreational activities; both of which had a component that included firearms.

The presence of firearms from the Surgeons Quarters may also represent the playful activities of children who gathered military cartridges and bullets as found objects of play (Baxter 2005:58). Collecting cartridges for play by children on Fort Boise was documented. The six-year-old daughter of Sergeant Falker collected cartridges, removed the powder from them, placed them in a heap, and proceeded to light the powder with a match (*Idaho Tri-Weekly-Statesman* May 64, 1882). Sergeant Falker's daughter sustained minor injuries, but the incident demonstrates that children gathered cartridges for play. Whether from play or situational learning children of Fort Boise were exposed to a variety of firearms.

Several cartridges recovered, like the .22 caliber, would not have been used by the military but instead have been used for hunting or target practice. Hunting was a common activity throughout the frontier army as a means to supplement dietary needs (McChristian 2007:173). Hunting is a likely contributing factor to the munitions assemblage, but it is worth noting that .22 caliber cartridges were popular gallery, or target practice, rounds (Suydam 1960:45). In sum, the munitions artifacts recovered from Fort Boise provide insight into the complexities of life on a fort, providing material evidence of changes in munitions over time – but also shedding light on the role munitions played in non-military life.

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