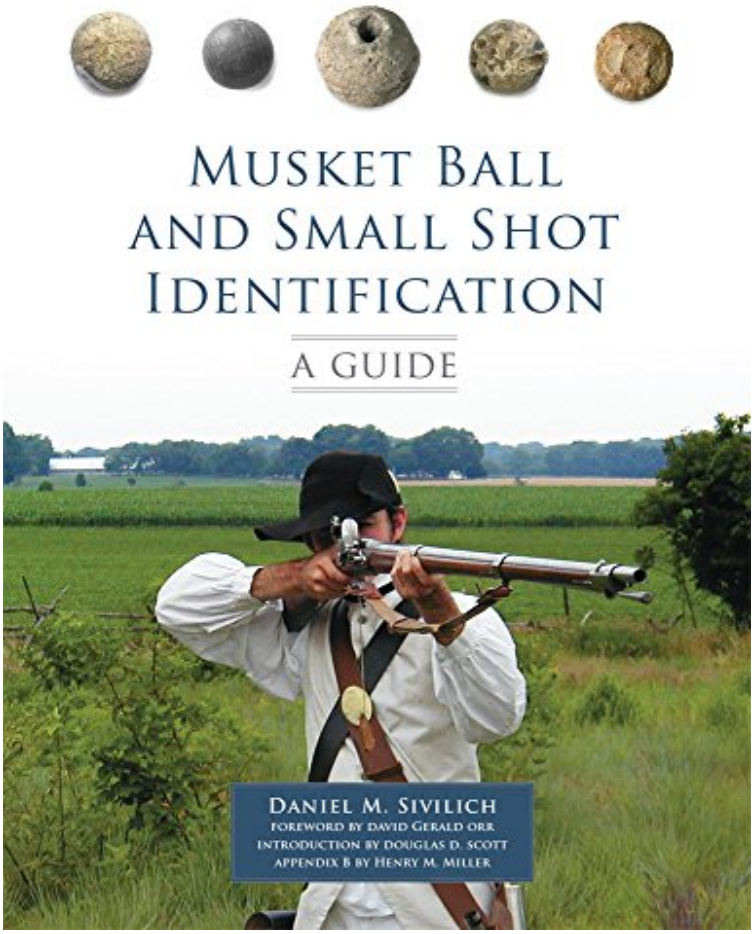

Musket Ball and Small Shot Identification: A Guide

Daniel M. Sivilich : Musket Ball and Small Shot Identification: A Guide before purchasing it in order to gage whether or not it would be worth my time, and all praised Musket Ball and Small Shot Identification: A Guide:

1 of 1 people found the following review helpful. Excellent photos/some inaccuraciesBy gimpyinlincolnThe documentation of battlefield artifacts is extensive and the book easy and quick to read. The photographs, the most important part of the book, are of excellent quality. I read this book from the perspective of a scientist and a muzzleloader shooter. I found a few of the authors interpretations of the musket balls strained, but Im not going to quibble with those. As a resource for battlefield archeology I recommend this book.As an experienced muzzleloader shooter, however, I do take issue with some of his statements. Whereas, most readers of this book will pass these over, I believe they are misleading and should be corrected. When something is published many people tend to accept it as gospel and inaccurate information is then disseminated and perpetuated.Most egregiously on page 23 he states, Numerous graduated-diameter musket ball molds have been found for use with civilian hunting or fowling muskets.

Each musket ball used has a slightly smaller diameter than the previous ball. He goes on to assert, The shooter would step down the ball size after each shoot. He repeats this assertion on page 66, Hunting muskets (often referred to fowling pieces) often came with a musket ball gang mold (figure 4.1) that had gradually decreasing-diameter ball cavities. As described earlier, a smaller-diameter musket ball would be used for each consecutive shot.It is true that some graduated-diameter molds were produced. The author, however, offers no documentation that such molds were supplied with fowlers for the purpose he states, and, I know of none. He simply makes that assumption. Single cavity molds were often supplied with muskets, fowlers, and rifles to cast balls that fit the caliber of the bore. To be blunt it is nonsense to assert that balls of progressively smaller sizes were used for consecutive shots. Based on this statement and others I infer Sivilich does not hunt or have much experience with firing live ammunition from a muzzleloader. Bores do not foul so quickly as to require a smaller ball after each shot. Moreover, a hunter is lucky to fire one or two shots at game in the course of a day. Then there is the impracticality of separating balls of different caliber in the shooting pouch to select each smaller ball.A probable purpose of such a mold was to cast balls for the different caliber muskets and fowlers carried by militia soldiers. A Philadelphia Association Committee of Safety report 29 May 1776 considered "a proper mode of providing Cartridges for the different bores of Fire-Locks carried by the Associators. They directed that forty-four sets of Formers (dowels to form cartridges) be supplied for the seven calibers of guns. It is likely that towns and the Continental Army purchased gang molds to stock balls for the different caliber weapons that were in common use.On page 20 Sivilich states, Soldiers did not load their muskets using a powder horn to charge the musket and then drop in a loose ball as Hollywood would have us believe; this procedure would have been too slow, and the variable powder charges would have created inaccuracies in hitting a target from shot to shot.The charge is not dumped into the bore directly from the powder horn. A powder measure is used insuring the same charge each time. Some type of patch or wadding would have been used to make sure the ball remained against the charge. Another reason not to charge directly from the powder horn is that the horn is in effect a small grenade. It is possible that any embers remaining in the bore after firing could ignite the horn.He goes on to say, Instead, soldiers carried premade paper cartridges that had an accurately measured powder charge and musket ball. This would guarantee that the musket ball would be propelled by the same force. It is true that soldiers would carry cartridge boxes. However, there is a great deal of documentation that cartridge boxes often were in short supply and powder horns were commonly carried by soldiers especially during the first two years of the Revolutionary War. Below are four examples of many:An account of the Battle of Bunker Hill testifies to the use of powder horns and the paucity of cartridge boxes. "Every man was immediately supplied with two flints, and a gill of powder with fifteen balls to form into cartridges, but nearly all of them were destitute of cartridge boxes, employing powder-horns only; and scarcely any two of their guns agreeing in calibre, they were obliged to hammer their balls to a proper size for the pieces." Owing to the scarcity of cartridge boxes (and other unspecified accouterments) among New England soldiers encamped at Cambridge in February 1776, General Washington directed on the 16th that powder horns and shot pouches be issued to them. The General is surprised to find the Militia applying for Cartouch Boxes and other Accoutrements, when he had not a doubt, but they would have come compleatly equipt--As the case however is otherwise, he directs that they should be served with Powder-horns and Shot pouches, in lieu of Cartouch Boxes. Sir: I wish to know, how many horns have been delivered to your department in consequence of the general orders for that purpose; and that you would take measures to have a sufficient number of them converted into the common powder flasks for the proposed expedition (George Washington to Nathanael Greene, Head Quarters, Middlebrook, April 5, 1779). The recollection of Amos Baker, the last surviving soldier at the Concord battle: The British had got up two of the planks to the bridge. It is a mercy that they fired on us at the bridge, for we were going to march into the town, and the British could load and fire three times to our once, because we had only powder-horns and not cartridge boxes, and it would have been presumptuous.Sivilich devotes a chapter to fabric impressions on musket balls. Balls loaded using cartridges would not have fabric impressions. The large number of balls found with fabric impressions supports they were loaded using a powder horn and patched ball. Although, many of these are interpreted as rifle balls, he does attribute some patched balls as being fired from a smoothbore. By the way, the patch separates from the ball shortly after it leaves the muzzle. The condition of the patch (picked up on the ground several yards in front of the muzzle) is a clue to achieving an optimum powder charge and patch thickness.The cartridge did contain a standard measured charge. How much of it was transferred into the bore is in question. Soldiers first would use part of the charge to prime. Under battle conditions Im sure powder was spilled when priming. There is anecdotal evidence that to mitigate the recoil soldiers would purposefully spill some powder further reducing the charge an unknown amount. So its likely that variable charges of powder were introduced into the bore.Typically, reenactors will use very tight-fitting musket balls for competition matches to reduce windage and improve accuracy. During this experiment, ball 231FL-103 was originally 0.74 inches in diameter. The tight fit caused a barrel band impression on the musket ball. (p. 49). Its not clear that Sivilich understands that lead bullets (balls) obturate upon firing. He seems to attribute barrel bands only to those rammed in a tight bore. In my own experiments with banding, as a control I duplicated, except for the very deep ramrod impression, by ramming (pounding the rammer lightly with a hammer) the ball shown in Figure 3.2. In the light of the statements on page 23, and 66 discussed above, did the reenactors use balls of progressively smaller

diameter for each subsequent shot? The question is rhetorical.Many flint wraps can be differentiated from a flattened piece of lead because of a distinctive hole in the fold line. The left photograph shows that a hole may have worn through the lead by friction with the jaw screw (p. 90). It is common practice to notch the flint wrap (lead or leather) so that the flint bears firmly against the top jaw screw not cushioned by the wrap. The reason is to enable the firmest possible striking force against the steel (frizzen) to help ensure good sparking.This is a fine contribution to the field of battlefield archaeology. Unfortunately, it appears the author lacks experience with target and hunting use of smoothbore flintlocks resulting in several inaccurate statements.0 of 0 people found the following review helpful. Five StarsBy John PolingExcellent reference book. I'm glad I finally got around to buying it. Well worth the money!0 of 0 people found the following review helpful. Five StarsBy CustomerFantastic reference book!

In the past, an excavated musket ball might simply have been catalogued as either a spherical lead bullet or an impacted bullet. But each recovered ball, far from being a mere lump of lead, is a part of history and has a story to tell. With the help of new equipment and research techniques, and an increase in the number of discoveries, these narratives can finally contribute exacting detail to the historical record. Battlefield archaeologist Daniel M. Sivilich provides readers with the tools and techniques to unlock the stories of small shot in this book, the first definitive guide to identifying musket balls, from the oldest formed to those fired in the early nineteenth century.Musket Ball and Small Shot Identification: A Guide traces the history of musket balls and small shot, and explores their uses as lethal projectiles and in nonlethal alterations. Sivilich asksand answersa variety of questions to demonstrate how a musket ball found in a military context can help to interpret the site: Was it fired? What did it hit? What type of gun is it associated with? Has it been chewed, and if so, by whom or what? Was it hammered into gaming pieces? By equipping historians and archaeologists with the information necessary for answering these questions, Sivilichs accessible work opens new views into firing lines, casualty areas, and military camps. It dispels long-held misperceptions about lead shot having been bitten by humans, offers examples of shot altered to improve lethality, and discusses balls made of materials other than lead, such as pewter. Coupling detailed analysis with more than 300 color and black-and-white illustrations for comparison and identification, this guide will prove indispensable to historians, battlefield archeologists, and collectors. It is a critical resource for understanding the full story of firepower.

Daniel M. Sivilichs Musket Ball and Small Shot Identification: A Guideis the result of twenty-eight years of research and collaboration. The Guide is an essential reference for any archaeologist studying eighteenth-century battlefields.Garry Wheeler Stone, historian (retired) for Monmouth Battlefield State Park