Firearms Manufacturing, Gun Use, and the Emergence of Gun Culture in Early North America

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Few history books have generated the extreme responses of Michael Bellesiles’ *Arming America: Origins of a National Gun Culture*.¹ Both hailed and cursed by the general public, scholars, and political activists, *Arming America* achieved a rare feat for a piece of historical scholarship: it has sparked widespread attention for historians and the historical profession. But that same attention proved detrimental, for no other work spawned such unrelenting scrutiny.² As a result, much of Bellesiles’ research is now considered questionable and his argument has been smashed to pieces. Predominantly, critics correctly focused on Bellesiles’ poor use of evidence, especially probate inventories and militia returns, but the critics fail to grasp the true value of his work.

Although the merit of Bellesiles’ research in *Arming America* may be somewhat questionable, the book raised a number of important questions about colonial America that were overlooked in the rush to discredit the author. While his argument may no longer be deemed as dependable, several questions *Arming America* raised need to be addressed: Who owned firearms in colonial America? Where did they get them? Who made them, and why? What did people do with guns? Was there a culture of guns and, if so, who participated in this culture? Unfortunately, many of these questions can never be

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accurately solved, but three major issues Bellesiles raised about early America can be answered: where did colonials get guns; how did they use them; and, was there a gun culture.

ILLUSTRATION 1: This early 17th century drawing by Samuel de Champlain depicts the first known use of European weapons in native warfare. Champlain put himself and his firearm at the centre of the 1609 battle on the shore of Lake Champlain between the Huron and Algonquian companions versus their traditional Iroquois enemy, emphasising the usefulness of firearms to the success of the campaign. According to Champlain, the significance of guns went well beyond shock value as historians often suggest, since he claims to have shot two Iroquois chiefs during the confrontation. Of course, his actions also set off a prolonged war between the French and the Iroquois. Samuel de Champlain, ‘Defeat of the Iroquois at Lake Champlain,’ Library of Congress.

Most firearms got to the new world in the hulls of ships. The power and effectiveness of firearms made them essential components of European armed forces and important tools in the voyages of exploration and conquest. No other weapon matched the frightening effect caused by the firing of a gun. The noise, flames, and smoke that
bellowed from the barrel terrified those unfamiliar with it, while leaving even the most experienced soldiers impressed and somewhat dazed. Giovanni da Verranzzano noted this phenomenon in 1524 while on the Arcadian coast somewhere south of New York harbour: a Native man, upon seeing French sailors fire a matchlock, “trembled all over with fear, and remained as if thunderstruck.”

Firearms were useful for more than just protection, since even unskilled hunters killed a wide variety of animals without demonstrating much in the way of the physical prowess required for using the bow, allowing hunters to drive most wild animal populations from settled regions before the start of the eighteenth century.

Due to production methods and demand, there were numerous limitations on the supply of firearms in the New World. Early firearms manufacture depended on fabrication by a single gunsmith, limiting production while increasing costs. As value and demand steadily increased, innovative individuals were organising centres for firearms manufacturing throughout Europe by the end of seventeenth century. These centres combined the production of numerous craftsmen, like carpenters, blacksmiths, locksmiths, and assemblers, making it relatively quick and inexpensive to produce individual guns. The English manufacturing centre at Birmingham was one of the most efficient in Europe. Birmingham produced large quantities by decentralising work. Guns were not made by single firms or even individuals, but by sub-contractors focused on mass production of individual parts. By dispersing the skills of the gunsmith, a gun making team was created of several partially skilled workers: a barrel maker, stocker, stock maker, locksmith, or simply an assembler. Since firearms manufacturing was tied
to national defence, European production fell under government scrutiny in order to ensure supplies for the military and to control possession.\textsuperscript{5}

Even after manufacturing was organised, demand far outpaced production. Most firearms were for military use, so manufacturers filled government orders first. With national security being imperative, most firearms generally remained at home rather than being sent abroad. Even so, there were never enough muskets available to arm all of the soldiers a nation could field.\textsuperscript{6} In part, this resulted from the standard belief that larger armies were better, so it was more important to put as many men into the field as possible rather than have smaller, better armed units. Hence, most soldiers in European armies carried the cheaply manufactured and easy to use weapons like the pikes, or halberds, which were effective against other infantrymen and helped to drive away enemy cavalry.

The opposite tactic was employed in the American colonies. Most Colonials believed that “their survival depended on . . . an advantage of military technology [firearms] that the Indians could not match. Bullets flew faster and farther than arrows, and inflicted more damage if they found their mark.”\textsuperscript{7} As a result, firearms quickly became the main weapon of choice for both individual protection as well as defending the colony. But soldiers were notoriously wasteful of supplies and weapons, even firearms, as noted on many occasions by their officers. In the midst of the Revolution when firearms and supplies were scarce among American forces, General John Lacey complained that soldiers in the Continental Army in 1777 “left their camp equipage strewed everywhere--Muskets, Cartouche boxes, Camp kettles, and blankets—some in and some out of the huts the men had left, with here and there a Tent—some standing and some fallen down.”\textsuperscript{8}
Unfortunately, Colonials held a secondary position when government firearms were dispersed from England, and they were often last when it came to consumer purposes. Birmingham supplied England’s army, navy, and the East India Company as principal customers, then mercantile interests like the Royal African Company and the Hudson Bay Company, and finally, it filled orders from the American Colonies. Guns were invaluable to the East Indian Company, going to Company forces and forts, but occasionally sold or given to native rulers as presents in exchange for trading rights. The African slave trade was the most valuable mercantile interest for Birmingham in 1765, prompting Lord Shelburne to note that for the proceeding 20 to 25 years Birmingham sent “annually above a hundred and fifty thousand [firearms] to the coast of Africa, some of which are sold for five and six-pence apiece.” One Birmingham firm alone, Farmer and Galton, increased production to 25,000 and 30,000 guns per year for the West African market alone in 1754, but still could not meet all orders.

Commercial interests within the colonies further divided firearms sent to America. Most went to the fur trade, either as gifts to native business associates or as consumer goods. In many regions, colonials like Alexander Spotswood (Virginia’s Governor) and William Byrd (Virginia gentleman) found “the Indians were much better equipped than the colonist, thanks to the fur trade.” The American fur trade depended on an uneasy cooperation between Europeans and Native Americans. Native peoples acquired furs either by harvesting, by trading with neighbours, or by improvising an amalgamated system of trade and harvest. The most prominent trade goods amongst the inventories of fur traders were firearms, ammunition, and metal goods such as kettles, knives, hatchets, and fire steels, but they were far less important than firearms.
Numerous fur trading enterprises operated in North America, but the Hudson Bay Company (HBC) left the most extensive documentation. During its first hundred years, the HBC traded over 1,400 guns a year. At times, HBC purchases exceeded 2,000 trade guns, plus arms bought to protect posts and ships managed by the Company.

Even so, the HBC was not the only fur trading enterprise in North America. It would be impossible to document every trader because participation was too diverse and widespread amongst the colonial populations. Even worse, the fur trade was divided into three regional areas of interest. The HBC controlled the northern region, but the earliest trade was conducted in the second region: New England.

Long before European settlers came to New England, traders plied coastal river ways in search of beaver pelts. Initially, the beaver trade depended on an exchange of commercial goods rather than weapons because the government outlawed the sale of firearms to native peoples, but an illicit trade of arms pushed colonial governments to change the policy. Official recognition of the firearms trade did not appear until 1669, when the General Court of Plymouth began licensing certain colonists “to trade powder, shot, guns, and furs with the Indians,” tapping into a legal trade the Massachusetts General Court passed a few months prior. Competition was fierce in New England’s beaver trade. The Plymouth magistrate complained that “a great part of the fur that is now carried by the Indians to Boston” because guns were being “sold there at an under rate” merchants trying to steal the Indian customers from Plymouth.

The third fur trading region stretched across the southeast from Virginia to Louisiana, focusing on deerskins rather than beaver pelts. The southern colonial governments actively tried to regulate the fur trade. Indian trading was supervised by the
general superintendent, and traders had to obtain a license to ply their wares. Fur trading regulations resulted from the close proximity of enemy European powers in the southeast, which closely tied the fur trade to colonial protection and international affairs.\textsuperscript{17}

With enemies in every direction in the southeast, the European trade of firearms for furs was not merely a commercial activity, but a defensive act attempting to ally Native American nations to the colonies. Trade with neighbouring Indian nations certainly yielded a lucrative harvest of furs for European markets, but friendly neighbouring tribes acted as buffers to intimidation from other European colonies, augmenting colonial forces when foreign invasion threatened. Likewise, native nations needed the firearms trade. It brought manufactured textiles and tools, but especially firearms with which, in an endless series of wars and skirmishes throughout the colonial era, they attacked one foe after another.\textsuperscript{18} Firearms made a native nations powerful, improved food acquisition, and increased the number of deerskins for trade, but dependence on firearms mandated a compulsory participation in a trade system that led to involvement in European intrigues.

Evidence for Indian dependence on firearms and the problems that emerged from it were widespread. Guns and ammunition were 51 percent of the total merchandise yearly traded to the three villages of Grand Caddo, Petit Caddo, and Yatasis in Louisiana.\textsuperscript{19} The Cree Indians of Canada were so dependent on goods from HBC traders that they abandoned their abundant homelands to reside year round in the swampy disease infected lowlands near company posts, exposing themselves to food limitations and exposure to disease. Without arms and munitions the Cree were defenceless, and unable to obtain furs to purchase other trade items.\textsuperscript{20} In the seventeenth-century, the
Iroquois purchased large numbers of firearms in order to wage prolonged genocidal war against neighbouring tribes to procure furs and control fur producing regions. This technological advantage brought the Iroquois a dependence that eventually carried political significance, since the need for guns pulled them into a devastating series of European wars during the eighteenth century. Although the choice to acquire and use firearms was voluntary, such conscious decisions were predicated on the realistic recognition that muskets were more devastating than bows and arrows; pelts and hides necessary to buy firearms. More munitions meant better protection, more food, and more deerskins for trade, which yielded more skins to buy more munitions.

The financial importance of European participation in the fur and gun trade cannot be ignored, especially since the value of guns was high enough to influence activities within colonial governments. In 1725, the French budgeted 4,000 livres to purchase guns as gifts for Indian allies and customers, a figure that grew steadily each year until the final defeat of France in 1764. Conservative estimates suggest 200,000 muskets came from French factories to America as gifts for customers during the 100 years that France traded guns. The Spanish governor of Louisiana, Francisco Luis Héctor de Carondelet, reported to the Spanish ministry in 1795 that arms, powder, and shot presented to Indians in north Florida cost $55,000 a year. In *Observations on the Plan for the Future Management of Indian Affairs*, John Stuart, England’s Superintendent for Indian Affairs in the Southeast, noted a similar situation. Throughout the report, Stuart stated that the gun trade was so profitable among the Indian tribes that it was necessary for “one Trader to be allowed to every hundred and fifty Gun-Men in each
Unable to participate in the trade, Stuart gave traders financed by his friends’ exclusive rights to the most valuable markets.

Other government leaders faced similar ethical dilemmas. Jacinto de Barrios y Jáuregui, a rather cunning Spanish governor in Texas during the 1750s, whose need to provide guns for his government was only matched by his total lack of scruples, sold government firearms held in storage for defence to Indians along the lower Trinity River in exchange for deer and buffalo skins. When the arms absence was discovered, Barrios used government funds to obtain replacements from French merchants stationed at nearby Natchitoches, which he quickly sold as well. Not only did the value of the firearms persuade the governor to defraud his government out of a considerable sum of money, but he completely disregarded the defence of his colony and Royal prohibitions against the selling firearms to Indians.

Participation in the firearms trade also instigated questionable business activities among the native peoples. New Mexicans carried on a vigorous trade with neighbouring tribes, exchanging weapons, munitions, horses, and agricultural produce for furs, buffalo hides, meat, and Indian slaves. Often the trade took place during annual fairs at Taos or Pecos, where Ute and Comanche raiders gathered to trade. The Indians, one observer noted in 1760, brought “plunder they have obtained elsewhere.” As some individuals traded peaceably at Taos or Pecos, other members of the nation “make warlike attacks on the distant pueblos” of their neighbours and sometimes even their allies.

While trade in settled regions sparked deceitful and conniving behaviour, the trade in unsettled frontier regions was extremely dangerous and extraordinarily profitable. Joseph Doddridge documented the dangers by noting the outcome of traders in
the Ohio country at the start of Pontiac's Conspiracy in 1763, “out of one hundred and twenty of them, among the different nations, only two or three escaped being murdered.” Despite the risk, thousands headed into Indian country each year. For 1777 alone, there were 2,400 voyageurs issued licenses through the French government at Montreal and Detroit, the HBC sent another 2,500 out, and the various colonies of British America authorised approximately 2,300, suggesting that almost 7,000 traders were sprinkled from the Rocky Mountains to the Appalachian Mountains, from the Hudson Bay to the Gulf of Mexico.

Once traders crossed the tenuous line between European settlement and Indian country, they entered a world unlike anything in the east. The security afforded by the nearness of settlements, suppliers, and government authorities abruptly ended. Traders were no longer in the majority, being instead a much smaller number set against increasingly larger populations of their native customers. The seasonal nature of the trade, predominantly occurring from late spring to early autumn, guaranteed that traders had limited impact on the west, merely passing through regions to collect the previous winter’s store of hides and pelts, settling debts, and making necessary advances to trusted hunters. Only later would men like gunsmiths, carpenters, and blacksmiths, whose skills were especially desired by Indians and frontiersmen alike, decide to build posts in native towns and frontier regions in order to reside there year round.

Although the arrival of settlers altered the frontier situation for fur traders, many came with the intention of participating in the Indian trade. Of the new arrivals settling the Ohio valley from 1725 to 1776, 251 actively engaged in the Indian trade. In fact, frontier settlements were often organised around the trade with Native Americans. At the
start of the French and Indian War in 1756, the Earl of Loudon occupied the frontier settlement of Albany and noticed most residents were involved in the fur trade. Immediately resenting the presence of the military because it disrupted their profits, the populace became enraged when Loudon billeted troops within private structures. In the hope of either ending the occupation or forcing Loudon to leave, the mayor and local notables sent a petition to the colonial government complaining, “we are not Master of our own businesses nor houses, so that it is very hard living here at present.”

Once notified about the petition, Loudon lost patience with the residents of Albany, threatening to destroy everything associated with the Indian trade. Loudon organised a systematic inventory of every occupant and structure in the town. The resulting list of occupations (see Table I) indicated that while only 10 people listed themselves as Indian traders nearly the entire population of Albany (approximately 343 people) directly or indirectly engaged in the Indian trade. Occupations varied greatly, with 97 people holding mercantile jobs, 42 working in shipping or transport, and 91 practicing artisan skills crucial to the Indian trade. The remainder of the population either did not have an occupation assigned to them (76) or provided services to the city (62).

One of the most interesting occupations noted by the Albany inventory was that of gunsmith. In an isolated frontier town like Albany, all individuals living in the community had to support themselves. Yet survival created mutual interests that necessitated cooperation. Although the five individuals identified as gunsmiths represent less than two percent of the total population, their residence accentuates the importance of firearms in the fur trade. Firearms were difficult to obtain even for traders residing in port towns, which means the difficultly and expense Albany traders endured to acquire
guns was even worse. In an effort to avoid supply limitations and transportation expenses, Albany residents voluntarily supported the gunsmiths, because they made and repaired firearms, which served the market needs.

But it is safe to assume that firearms production in Albany stretched well beyond just five individuals. While it was common for a gunsmith to be able to manufacture a firearm completely by himself, few actually did it this way. The manufacture of a firearms involved expertise in a myriad of skills, ranging from the casting of iron into gun barrels to the making of the gunlocks and firing mechanisms to the carving of the wooden stocks, not to mention assembly and proofing of the arm once it was finished. If one

<table>
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Sources: John Campbell, Earl of Loudon, *List of the residents of Albany, 1756,* Loudon Papers, LO3515, Hunting Library.
individual focused on the production of a gun from start to finish, it would not only take hundreds of man hours but would be incredibly ineffective cost wise. As a result, most gunsmiths focused on piece work manufacture. They would make the necessary materials for several guns at one time by fashioning gun barrels until materials for production were consumed, then they would focus on firing mechanisms or gun stocks until all of the parts for multiple weapons were created. This was a more useful employment of both labour and materials, since the coal for the fire and the materials for barrel production would only be lit once and the skills of labour could be perfected as production continued and would not have to be re-established with each new weapon.

Unfortunately, piece work manufacturing of firearms was just as inefficient as making a gun individually, requiring large outlays of materials and slow production times. As a result, most colonial gunsmiths acted as assemblers of finished firearms rather than the manufacturers of them. They relied on the expertise of a handful of local craftsmen while they focused on lock assembly and finishing of the final product, which were the two most complex and technical aspects of firearm production. With this in mind, gunsmiths commonly contracted with local blacksmiths to produce barrels and carpenters to produce rough stocks. Hence, at some point in any given year, the six blacksmiths, four smiths, and 22 carpenters in Albany probably assisted in the production of firearms, greatly increasing production levels for local merchants while nearly quadrupling the number of people (37) focused on firearm manufacture.

Local manufacture offered colonial traders and governments a way to circumvent the limitations set on the levels of firearm importation available to the colonies. Historically, firearms were only manufactured in areas—America, India, Afghanistan,
China, and Japan—where cheap imports were not readily available due to the existence of importation limits or embargos, rather than an advanced technical competence among the inhabitants.  

34 Where firearms were desired but limited, local manufacturers immediately found ways to repair old and broken firearms or produce new ones for local consumption. Local manufacture required the development of skilled tradesmen to emerge from the populace, immigrate into the region, or some variation therein; all three situations occurred in North America.  

The capability to locally manufacture firearms was closely tied to the ability to repair them. Muskets were extremely temperamental, so the aptitude to clean and mend parts was often more critical to the user than being able to accurately fire the weapon.  

36 Records detailing firearms repair among colonists are limited because prevalent technological knowledge within their society meant possessing the skill was not unusual and went largely undocumented, but their native neighbours offer a more cogent example of how quickly a non-technological society could develop mechanical skills. Indians were repairing arms shortly after they got them. As early as 1640, William Bradford expressed concern that Indians possessed the artisan skills necessary to support a military struggle against the English colonies. He observed they had “moulds to make shot of all sorts, as musket bullets, pistol bullets, swan and goose shot, and of smaller sorts” and that they could “mend and new stock their pieces . . . as well in most things as an Englishman.”  

37 Bradford believed they learned the craft either by trial and error, or under the tutelage of Englishmen. According to Indian trader James Adair, the Cherokee by 1730 could “fresh stock their guns, only with a small hatchet and a knife, and straighten the barrels, so as to shoot with proper direction. They likewise alter, and fix all the springs of the [gun] lock,
with others of the sort they may have out of use; but such a job costs the red artist about
two months work.”

The ability of Indians to repair firearms was not limited to those living close to Europeans. Archaeological examination of middens found in Indian villages at Malta Bend, Missouri, uncovered files, screwdrivers, hand vises, and similar gunsmith tools along with various gun parts, showing villagers were repairing guns as early as 1750. If Indians were repairing their own firearms, it is safe to assume colonials were as well.

While amateur gun repairs were difficult to trace in European settlements, there is widespread evidence documenting the presence of gunsmiths among colonial populations. Like the population inventory of Albany suggests, gunsmiths lived among the populations of every European colony, from urban areas to frontiers. Table II provides numbers for gunsmiths who were living in the British colonies until the American Revolution as well as the States afterwards. Although not the only European settlements on the continent, Britain’s colonies offer the best example for estimating gunsmith numbers in the various societies on continent because they were the best documented. Data indicates that every colony had at least one gunsmith residing in it when it established, and most had at least ten gunsmiths by the end of the first twenty-five years. Much like the colonial population in which they resided, figures for gunsmiths increased exponentially after 1700, going from just ninety-two for the period 1700 to 1725 to more than eight hundred gunsmiths listed during the period 1751 to 1774. Every colony showed at least gradual growth in gunsmith numbers over time, but most increases can be attributed to immigration to the colonies rather than local training.
Except for working at a manufacturing centre created explicitly for arms production, gunsmiths in the colonies resided mainly in urban areas, port towns, or capitols. As indicated in Table III, most urban areas in British America had at least one gunsmith regardless of size. Larger population centres had more gunsmiths, but some smaller towns like Albany had more than one gunsmith. Based on advertisements in local newspapers, urban gunsmiths seemed to focus production on specialised arms for hunting and protection. These items ranged across various gauges, but included rifles, shotguns, and pistols. In times of war, gunsmith numbers increased and production switched to military arms, particularly muskets.

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Sources: These estimates are heavily indebted to the extensive lists of gun makers compiled by gun collectors to identify the manufacturers of weapons in their collections. Some of the most valuable lists of arms makers include, but are not limited to Dwight Demeritt’s *Maine Made Guns and their makers* (1973), William O. Achtermier’s *Rhode Island Arms Makers and Gunsmiths, 1643-1883* (1980), and James B. Whisker’s *Arms Makers of Colonial America* (1992). To arrive at the estimates listed in the table, I made a list of arms makers from the published sources, then verified the names on the list and added new individuals through intensive examination of manuscript sources found in the various the archives and public and state papers of the thirteen colonies, tax records, revolutionary war pensions, deeds, wills and estate papers. In some cases, I utilised individual printed versions when available for the archives and papers of the thirteen colonies, like *American Archives*, Peter Force, ed. (Washington, DC: U.S. Government Printing Office, 1837-1853). I also relied on advertisements found in newspapers from the period for the various colonies. Regardless of how an individual arms maker was identified, no individual was included in the table unless there were two separate documents showing evidence that identified the individual as a gunsmith.
Although most gunsmiths lived in urban areas, frontier regions were not devoid of such artisans. Gunsmith populations followed general trends of settlement. Most gunsmiths lived in eastern settled areas, with numbers dissipating gradually toward the west. Frontier gunsmiths supported the military or participated in the Indian trade. In some cases, frontier towns demanded that the government send gunsmiths to reside among them. After such inquiries, Massachusetts ordered that settlements in Maine had

| Year Period | Albany, NY | Annapolis, MD | Baltimore, MD | Boston, MA | Charleston, SC | Charlotte, NC | Concord, NH | Frederic Town, MD | Frederic Town, MD | Hagerstown, MD | Halifax, NC | Hartford, CT | Manhattan, NY | New Haven, CT | Newport, RI | Philadelphia, PA | Providence, RI | Salem, MA | Salisbury, CT | Salisbury, NC | Savannah, GA | Williamsburg, VA | Williamsport, MD |
|-------------|------------|---------------|--------------|------------|---------------|---------------|-------------|-----------------|-----------------|---------------|-------------|--------------|-------------|-------------|----------------|----------------|-----------|--------------|--------------|--------------|----------------|----------------|
| 1600-1650   | -          | -             | -            | 1          | 8             | 12            | 7           |                 |                 | 3             | 8           | 10          |              | 2           | 1            | 2             | 1             | 4          | -            | -             |                 |                 |                 |
| 1651-1699   | -          | -             | 1            | 4          | 5             | 19            | 5           |                 |                 | 6             | 6           | 16          |              | 2           | 2            | 2             | 1             | 2          | -            | -             |                 |                 |                 |
| 1700-1725   | 3          | 8             | 8            | 10         | 14            | 10            | 4           |                 |                 |               |             |             |              | 3           | 3            | 1             | 2             | 3          | -            | -             |                 |                 |                 |
| 1726-1750   | -          | -             | -            | -          | 8             | 63            | 10          |                 |                 |               |             |             |              |             | 6           | 6             | 1             | 2             | 2          | -            | -             |                 |                 |                 |
| 1751-1774   | 5          | 8             | 10           | 14         | 10            | 10            | 4           |                 |                 |               |             |             |              | 3           | 3            | 1             | 2             | 3          | -            | -             |                 |                 |                 |
| 1775-1783   | 6          | 6             | 10           | 16         | 10            | 10            | 4           |                 |                 |               |             |             |              | 3           | 3            | 1             | 2             | 2          | -            | -             |                 |                 |                 |
| 1784-1800   | 7          | 7             | 13           | 15         | 15            | 15            | 5           |                 |                 |               |             |             |              | 3           | 3            | 1             | 2             | 1          | -            | -             |                 |                 |                 |

to have at least one gunsmith in residence to appease local residents and to facilitate trade relations with nearby Indians.\textsuperscript{43}

Clearly gunsmiths did not hide safely within the confines of towns or behind the palisades of frontier posts (see Table IV). Two gunsmiths were among the sixteen men who died with Adam Dollard in 1660 during a seven day fight with 300 Iroquois at Long Sault rapids on the Ottawa River, while armorers Jean Tavernier, Nicholas Tiblemont, Pierre Prudhomme, and Nicholas Doyon were with La Salle when he discovered the mouth of the Mississippi in 1682.\textsuperscript{44} Some gunsmiths even lived among the natives, often at the request of tribal leaders and under the pay of colonial governments. When Britain took over the French fort of Michilimackinac, two blacksmiths were sent to supply the needs of the community and repair guns of neighbouring Native Americans.\textsuperscript{45} John Fraser, a gunsmith from New York who had a gunsmith shop in western Pennsylvania, lived part of each year among the tribes of the Ohio Valley to appease local residents and facilitate trade relations with nearby Native Americans.\textsuperscript{46}

The number and location of gunsmiths depended on the situation within the individual colony. Periods of conflict had mixed results on the numbers of gunsmiths living in the colonies. During Queen Anne’s War (1702-1713), gunsmith numbers decreased in nearly every colony, possibly because they left the colonies with American forces. In contrast, a huge growth in gunsmith numbers occurred during the tumultuous twenty-three year period prior to the American Revolution, a time of external and internal conflict. Unwilling to depend on the British for protection, colonial governments showed a marked change in the policy. Entrepreneurs, financially supported by colonial governments, began producing firearms at manufacturing centres at Albany and
Manhattan in New York; Boston and Springfield in Massachusetts; Hartford, Waterbury and Salisbury in Connecticut; Lancaster County, Philadelphia, Warwick, Reading, and Carlisle in Pennsylvania; Frederick, Baltimore and Hagerstown in Maryland; Martinsburg, Williamsburg and Fredericksburg in Virginia; Salisbury and Halifax in North Carolina; Charleston in South Carolina; and, Savannah in Georgia.\textsuperscript{47} Eminent warfare was not the only reason for the growth in gunsmith numbers; there just were no arms available for importation from Europe. To increase the number of guns in their possession, colonial governments bought arms locally. Fittingly enough, the last permit granted by the colonial government of Connecticut (1774) was to outfit gunsmiths at Salisbury, as “Guns are much wanted at this Time when they cannot be imported from Great Britain.”\textsuperscript{48}

When war erupted, the Revolutionary governments increased their support of local production, sometimes expanding manufacturing centres and at other times creating new ones. Adam Stephen’s armoury near Martinsburg (VA) produced about a dozen high quality muskets weekly prior to the American Revolution. Once hostilities began, the factory expanded its’ workers to more than thirty men, twice the peacetime level.\textsuperscript{49} In June 1775, Virginia erected a musket factory run by state commissioners at Fredericksburg across the river from government sponsored arms production at the privately owned Rappahannock Forge.\textsuperscript{50} Arms manufactories in Maryland working under the direction of the Committee of Secret Correspondence drew money from the Continental treasury to fund the production of 1,000,000 pounds of powder, 10,000 muskets, 20,000 gunlocks, and 40 field pieces.\textsuperscript{51}
Since colonials found ways to procure firearms despite limitations to supplies, the next major question that emerges from the controversy surrounding *Arming America* was what colonials did with firearms. Colonials needed guns. They provided a means for personal defence, protection for land, and food for their families. In recommending the most valuable gear for a new settler, John Smith in 1631 believed many tools were useful, but a gun was “your best weapon.”\(^{52}\) The trade musket was perfect for colonials. It could be used for anything, was cheap to buy, intended for rapid reloading, easy to repair, light weight, had few delicate parts, and was capable of firing both shot and ball.\(^{53}\)

In much of Europe, hunting was limited to members of the upper classes who killed only for sport, or to poachers who killed for food at great risk. European forests

\(^{52}\)This text is not fully transcribed. The source text contains information that is not clearly visible in the image.

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were not public property, belonging solely to the nobility. Guns were expensive, and ownership restricted by law.\textsuperscript{54} Colonial America was completely different. Europeans in America turned to hunting with enthusiasm. Hunting surpassed every other sport for its notation in diaries, journal accounts, memoirs, and travel narratives.\textsuperscript{55} Even when discussing subsistence hunting, writers spoke about the pleasure associated with the endeavour. For people who had no prospect of legally hunting in Europe, America offered a new form of recreation guaranteed by Colonial charters.

As hunters, colonials rarely wasted.\textsuperscript{56} What was killed was eaten, or at least stripped of fur. Only after expanded markets for commodities derivative of animals appeared did Americans, whether European, Indigenous, or African, actually harvest animals. Decimation of specific animal populations only occurred when a species competed with humans or was extremely profitable. Settlement modifications (like clearing, draining, cultivating, burning, or mining) forced alterations in the life cycles of wildlife. Many species like deer, wolves, bear, squirrels, and crows were competition with landowners for the crops and domestic animals. Thus, they were destroyed as nuisance animals.\textsuperscript{57} To counter the problem of nuisance animals, communities and government officials organised hunts and offered bounties on predators and vermin. Entire communities swept the woods of unwanted species, with local newspapers publishing advertisements and body counts.\textsuperscript{58} Colonists dealt with wolves using bounties, which ranged from two pence to ten shillings to a few bushels of corn to an allotment of gunpowder and shot.\textsuperscript{59} Particularly rapacious wolves had high bounties placed on their heads; New Haven in 1657 offered five pounds to anyone who could kill “one great wolf
of a more than ordinary bigness, which is like to be more fierce and bold than the rest, and so occasions the more hurt."

The concentration of food supplies in fields increased squirrel and crow populations, which became such a problem that bounties were offered for their extermination. Peter Kalm, a traveller who visited most of the colonies, explained in relation to squirrels, “the infinitely greater cultivation of corn, which is their favorite food, is the cause of their multiplication.” When bounties failed, communities ordered men to hunt. The town meeting of Eastham (CT) ruled that no single man could marry until he killed six blackbirds or three crows. When the problem persisted, the meeting expanded the order saying “every unmarried man in the township shall kill six blackbirds or three crows while he remains single; as penalty for not doing it, shall not be married until he obey this order.” Virginia had similar policies, establishing annual quotas for residents in proportion to the number of tithables they possessed. In Augusta County, the collection of wolves’ heads was part of the county levy as early as 1735. More than 100 men in Richmond County accumulated 3,000 crow’s heads and squirrel scalps in 1749 and 1750, receiving a pound of tobacco for each. From 1750 until 1769, between 100 and 250 heads were collected annually in the Shenandoah Valley, mainly from the upper valley.

While colonials had numerous reasons for hunting, there were four main types in early America. Landowners represented the largest group. In most of colonial America, land patents specifically listed hunting, fishing, and fowling as privileges preserved for landowners. Colonials believed landholder hunting, like crop growing, was essential to survival. Edward Williams, a British traveller in Carolina and Georgia, told prospective
settlers that “for Provision of flesh” to “labor in the Woods.” In 1700, John Lawson remarked that “a poor Laborer that is Master of his Gun, hath as good a Claim to have continu’d Coarses of Delicacies crowded upon his Table, as he that is Master of a greater Purse.” John Norris of South Carolina boasted “a man that is a good Gunner and Fisher may find himself and Family with sufficient of Flesh, Fish, and Fowl, that he may very plentifully kill, whilst he is Recreating himself therein.” The necessity of hunting for subsistence did not remove the pleasure associated with the act. Ann MacVicar Grant found while visiting friends in New York that “there were three stated periods of the year when, for a few days, young and old, masters and slaves, were abandoned to unruly enjoyment, and neglected every serious occupation for pursuits of this nature [hunting].”

The necessity of landowners to hunt was not limited to the British colonies. Montfort Browne, while visiting Spanish West Florida, noted that “from the beginning of November to the latter-end of February, a man with his Gun may plentifully supplies a Family of Twelve or fourteen with choice Buffalo Beef, Bears Meat, Venison, Geese, Turkies, Ducks in the greatest abundance.” In 1774, Elias Durnford reported that scarce provisions forced many near New Orleans to “take to Hunting.” As he approached a settlement above Lake Pontchartrain a few years later, William Bartram noticed how “the inhabitants neglect agriculture; and generally employ themselves in hunting and fishing.” As noted by historian Daniel Usner, farmers in Louisiana “supplemented their diet with game, fish and other wild foods taken from local forests and waters. Slaves hunted, fished, and collected edible plants for their own use, for their owners’ kitchens, and for the regional food market.”
Market huntsmen were the second largest group of hunters. They were farmers, frontiersmen, rural youths, slaves, and Native Americans. Market hunters provided for themselves and local markets, especially around plantations, industrial areas, or urban centres. Sometimes, they included small teams (often family units) of hunters working on salary or on commission for wholesalers.\textsuperscript{75} Samuel Wilson, secretary to the Earl of Craven, wrote in 1682 that South Carolinian planters too busy to hunt employed “an Indian hunter, which they hire for less than twenty shillings a year, and one hunter will very well find a Family of thirty people with as much Venison and Foul, as they can eat.”\textsuperscript{76} But market hunters did not exclusively serve the wealthy. John Norris, also of South Carolina, noted that many settlers contracted to buy meat from professional hunters “for some Clothing of small Value and supply of Powder, Shot, and Bullets, for which they’ll supply the Family with Store of either Flesh, Fish, or Fowl thro’ the Year, while reserving to himself the Skins of the wild Beasts that he destroys.”\textsuperscript{77} A register book kept from 1744 to 1749 for Augusta County in the Shenandoah Valley of Virginia listed ten fur hunters who regularly provided meat to local residents, while acquiring a total of 1,286 deerskins, 93 fox furs, 67 raccoon skins, 14 otter pelts, 3 elk hides, 1 wildcat skin, and 202 pounds of beaver pelts for sale.\textsuperscript{78}

Game dealers were the third major group of hunters, representing those who sold game exclusively in urban markets. Large amounts of game exchanged hands, with the biggest markets being New York, Boston, Baltimore, Charleston, Newport, and Philadelphia in the east; and St. Louis, Pittsburgh and Chicago in the west. Though the market depended on competition, large dealers exercised significant control. Most maintained stalls in their respective cities, purchasing meat either from market hunters or
teams of hunters under salary. Hunters working for Virginia game dealers served various markets. Moravian missionaries travelling along the Cowpasture River at the upper end of the James River found a group of settlers “living like savages” as they hunt they sold to dealers in the Shenandoah Valley. When local markets offered low prices, the Shenandoah hunters even traded with dealers in South Carolina. August Savan, a free mulatto in New Orleans, supported his family by working exclusively as a hunter for local game dealers. Convoys of professional hunters working on salary for game dealers annually travelled on the Mississippi River between this rich animal habitat and the town of New Orleans. For a 1725 expedition from New Orleans, Guillaume Allain hired himself for 200 francs, forty pounds of tallow, fifty pounds of meat, four pots of bear grease, and half of all pecans he gathered.

Sport hunters represented the last type. Sport Hunting was performed exclusively by elites, who had more time for leisure due to their economic position within society. Their proximity to urban settings also created a distance that made a re-acquaintance with nature and the natural environment an attractive endeavour. The practice followed the traditions of English sporting gentlemen, who hunted in highly stylised manners both to preserve and reinforce their position as elites. A large number of wealthy men in New England, including many ministers, hunted for pleasure. English aristocrats visiting America found extraordinary opportunities for enjoying the “genteelest and best sport” of bird hunting with their provincial cousins, often astounded by the number and variety of birds available. Hunting was so popular among the upper classes that professional huntsmen like James Massey of New York, John Caldwalder of Philadelphia, and Levi Hollinsworth of Charleston supported themselves by leading gentleman hunts. While
class limited participation in sport hunting, the egalitarian nature of America meant that the lower classes tried to emulate their social betters by engaging in forms of sport hunting, but class divisions persisted. Among hunters in Gloucester County Virginia, John Clayton observed “Gentlemen here that follow the sport place most of their diversion in Shooting Deer,” while “the Common Sort of People who live among the Mountains kill great Quantities of Bears.” In 1709, John Lawson said, “Bear-Hunting is a great Sport [among the frontier people] in America. Some years ago, there were kill’d five hundred Bears in two Counties of Virginia in one winter.”

Even though hunting was an important reason colonials possessed guns, the necessity of defence forced many colonial governments to require all adult males to own a firearm. Since colonial security took a back seat in European defensive strategies, the colonies received only a small amount of military support, which essentially amounted to just enough for a few regulars, and a small stash of firearms for local forces. Despite the need for considerable military activity and the widespread ownership of firearms, colonial American society was not militarised. Colonials ordered military resources through systems of organisation that reflected their political and social character. In a society where labour was limited but land plentiful, few colonists would choose the life of a soldier, serving for low pay in some isolated and dangerous frontier fort.
ILLUSTRATION 2: Fox hunting’s popularity translated quickly to the colonies. James Seymour’s ‘Fox Hunting: In Full Cry,’ circa 1745. (Collections of the Colonial Williamsburg Foundation)

To ensure local defence, the American colonies developed a militia system patterned on European custom. As in Europe, the colonies instituted laws dictating militia organisation and providing personnel and materials for defence. Colonial militia laws, like this 1676 Pennsylvania law, stipulated that “every town shall be provided of a Sufficient ware house and Safe convenient place thereunto Adjoining for keeping Powder and Ammunition.” Since firearm supplies were limited, colonial governments broke with the European tradition of the government controlling access to guns. They created militias dependent on the local populace providing privately owned arms to staff militias, ordering every male “from Sixteen to Sixty years of age, and not freed by public
Allowance, shall if freeholders at their own, if sons or servants at their parents and Masters Charge and Cost, be furnished from time to time and so continue well furnished with Arms kept in constant fitness for present Service.” Only militiamen who did not have their own weapon to bring were provided arms by the government.  

Many colonials resented using their own weapons for militia service. Some militiamen simply refused to bring personal weapons to military service. They had no problem using government arms for their own interest, but using personal weapons broke with European tradition that the government provided arms for defence.  

After an insurrection broke out in western Maryland in 1777, William Lux went to stop the uprising. Hearing reports that the insurgents were well armed, Lux complained to the governor that “the people who cannot find one gun to go out in the militia can arm themselves completely in a mob.” Most colonies responded to such defiance with fines for recalcitrant individuals. In a few New England colonies, the problem was dealt with by offering bounties to soldiers who brought their own firearms. Connecticut armed a force of unprecedented size in 1758 by using bounties. Since the colony had only 1,962 government muskets available to arm nearly 5,000 men, government leaders offered a bounty (claimed by 81% of the militiamen) to those who brought personal weapons to militia service. Bounties for bringing arms varied, ranging from one pound ten shillings to two pounds ten shillings and a blanket. 

Colonial militia size depended on population density. A regional break down for Virginia’s militia from 1777 to 1784 demonstrates a commonality to all militias: regardless of where it was located, settled areas not under threat of attack often had fewer arms than those under direct threat of attack. In the sparsely populated frontier region of
the Blue Ridge Mountains, militia returns listed 2,615 men and officers armed with 2,194 guns (meaning 84% of the militiamen were armed). The moderately settled Piedmont region had 12,049 soldiers/officers armed with 3,474 guns (making only 29% of the militia armed). The coastal Tidewater region had 9,727 men/officers carrying 5,668 guns (making 58% of militia armed). Total returns for Virginia were 24,391 men/officers carrying 11,329 guns (meaning only 46% of the militia was armed).95

Military preparedness required militiamen to train regularly. With only a few exceptions, all white men from the ages of sixteen to sixty met monthly for training. They practiced hand to hand, marching and running, shooting accuracy. Training depended upon martial sports, so soldiers practiced the requisite skills in the morning and participated in officer directed martial contests in the afternoon.96 As the frontier advanced, the readiness of the colonial militias wasted away. Decay within the militia first appeared in densely settled regions where the threat of attacks had diminished, but it gradually moved westward as settlement and population densities shifted. Regardless of location, militia service eventually became a social or ceremonial activity rather than a military function as the need for defence steadily declined over time. Militia companies on the frontier maintained a higher standard of readiness, but their inability to devote extended time to the profession of arms inevitably meant that even the best militias were inferior in comparison to the professional armies of Europe, as was clearly demonstrated during the American Revolution.97

Even though colonials had many uses for firearms and wanted them badly enough to find innovative ways to obtain them, these factors alone do not necessarily mean that colonial society possessed a gun culture as Bell’s tried to point out in *Arming*
America. Generally, a culture is defined as a structure of beliefs, rationalisations, myths, and values that individuals within a society tell themselves in order to understand their place in the world. At times objects like guns become part of a culture, but there must be a demonstrated necessity for the object and a common understanding among members of the culture as to the value of the object. Once an object holds power within a culture, then possession of the object and the ability to use it properly allows individuals to form a web of connections with other members of their society and culture. As such, it is not enough to show that individual Americans sought out firearms or even prove that they had uses for them, but it must be clearly demonstrated that the colonies as a society placed value upon firearms and held common understandings about gun usage.

What Belllesiles missed in his push to argue that a gun culture did not exist before the American Civil War was that Colonials valued firearms greatly, leaving numerous clues about how important they were to their society and the level of gun knowledge individuals possessed. From the beginning of settlement, colonials believed that firearms were essential to the success of their society. When John Smith provided an eight item list of items new settlers must take to Maryland in 1635, six of the eight items were gun related, with two actually being firearms: a musket and a pistol. William Bradford insisted that New England colonists “bring every man a musket or fowling Piece,” while the Plymouth General Court by 1643 required every citizen to own at least one firearm and shooting accessories. Other colonies also believed that firearms were valuable enough to require ownership. In March of 1638, Rhode Island ordered, “every Inhabitant of the Island shall be always provided of one musket, one pound of powder, twenty bullets and two fademe of match.” The New Haven General Court (CT) had a similar
order in 1639, but expanded arms possession by saying, “every one shall be completely furnished with arms, a musket, a sword, bandoleers, a rest, a pound of powder, 20 bullets fitted to their musket, or 4 pound of pistol shot or swan shot at least.”\textsuperscript{101}

Even if many colonies expected residents to have firearms, it did not necessarily prove the colonials actually had them. Benjamin Franklin wrote in 1747 that Pennsylvania had “at least (exclusive of Quakers) 60,000 Fighting Men, acquainted with Fire-Arms, many of them Hunters and Marksmen, hardy and bold.”\textsuperscript{102} While Franklin seemed sure of widespread gun ownership in Pennsylvania, other regions tried to make sure residents possessed firearms and could use them. The Trustees of the Georgia Colony, careful about the type of individual that became a resident, required new settlers had a firearm and knew how to use it (a skill not entirely common in England among the poor), because “they consider each Inhabitant both as a planter and as a Soldier, and they were therefore to be provided with Arms for their Defense, as well as Tools for their cultivation, and taught the Exercise of both.”\textsuperscript{103} But such drastic measures were rarely necessary. Joseph Doddridge made an important observation about the gun culture of frontier America: men were not just familiar with firearms; they were an essential part of life. According to Doddridge, “a well grown boy at the age of twelve or thirteen years was furnished with a small rifle and shot pouch. Hunting squirrels, turkeys, and raccoons soon made him expert in the use of his gun.”\textsuperscript{104}
Contrary to the findings of Bell, studies of probate inventories show that many colonials owned firearms. Anna Hawley’s study of 221 estates in Surrey County (VA) from 1690 to 1715, found that among the poorest 30 percent of property owners about one-third owned guns, while among the wealthiest 70 percent of property owners approximately two-thirds included guns.\textsuperscript{105} Gloria L. Main’s study of 604 estates of married male householders for six counties of Maryland from 1657 to 1719 noted that 76 percent contained “firearms,” with ownership ranging from 50-58 percent for the poorest fifth of all estates to 93-95 percent for the richest tenth.\textsuperscript{106} Alice Hanson Jones’ figures from inventories for 1774 show guns were present in 51 percent of the inventories left by white males from Massachusetts and Connecticut, and in 56 percent of those from New York and New Jersey.\textsuperscript{107} Gun ownership was not limited to settled regions though. Elizabeth Perkins’ study of inventories taken in Jefferson County (KY) found that 33 percent of the bottom third of the population owned a gun, 80 percent of the middle third had guns, and 89 percent of the upper third had guns.\textsuperscript{108} By combining information from probate inventories, traders, and the number of gun makers working on the continent, it becomes apparent that firearms distribution had spread throughout most of colonial America (see Figure 1).

While records may provide some indication for levels of gun ownership in colonial America, studies of violence in early America can also offer valuable information on gun usage. Randolph Roth found that 10 of the 14 adult homicides in Vermont from 1760 to 1790 were committed with firearms.\textsuperscript{109} In the Georgia and the Carolina backcountry, the homicide rate soared during and after the Revolution. Firearms were the preferred means for dispatching adversaries, with 58 percent of the known adult
homicides occurring between 1800 and 1830 being committed with guns. Colonials not only had firearms, but they knew had to use them against each other.

Evidence for wide spread knowledge of gun use among individuals in colonial society was just as prevalent. Newspaper accounts, when detailing accidents with firearms, gun violence, and even hunting, assumed that readers knew how guns worked, could name their various parts, and could distinguish between proper and improper gun usage. Detailing the disastrous effect of firing a gun that had not been properly maintained, the Boston *News-Letter* described the event in the simplest of terms, stating “the Breech of the Barrel blew out, and is not to be found, the Lock blew off, and the Stock broke, and Split into several pieces.” An account of a misfire incident that killed a young boy demonstrated similar expectations for reader knowledge about gun parts and firearms usage, saying that while reattaching a dislodged flint, the shooter failed to properly disengage the lock, and accidentally killed his companion when the lock released. A 1788 story in the New Haven’s *Connecticut Journal* told how a Mr. Scales of Concord, New Hampshire, rejected the advice of friends about not overloading his gun when firing a salute, saying, “I will venture it.” According to the story, Scales lost his life when the force of the discharge wheeled him in front of a comrade as the man fired. Everyone present, including the victim, knew that firing a musket ball was a different enterprise from firing shot and that it could produce different effects.

Although evidence clearly suggested that colonials had firearms and knew how to use them, the only way to estimate whether such factors meant colonial society demonstrated a gun culture would be to compare it to a similar society. After the English Civil War, the civilian population of England ceased to have firearms or access to them.
Prior to that time, English citizens had the right to possess firearms and many did, as Joyce Lee Malcolm noted in *To Keep and Bear Arms*, and it was common for citizens to form defensive units to protect their communities during the civil war. In addition to private arms, counties maintained a magazine as part of the plan for national defence to arm adult males in the population, while nearly all nobility and gentry kept arms for hunting.

In an effort to limit uprisings against the government, Parliament actively sought to remove arms from private hands with game laws. The first of a series of laws appeared in 1671, greatly reducing the number of persons authorised to hunt and empowering the lord of every manor to appoint a gamekeeper who searched “houses for, and confiscate[d], sporting gear belonging to unauthorized persons.” Laws such as these ended the acquaintance of common people with firearms, and effectively stopped the cultivation of marksmanship as a popular country sport. Clearly, guns were only for special people in England. The government supplied equipment from its own stores for the militia when it was raised by the county, which was then reported to the government. The issuance of arms and accoutrements was tightly controlled, with only a limited ration of ammunition being issued for training.

Understanding that Englishmen could not use firearms, colonials saw themselves in a superior position and used that knowledge for their own benefit. George Alsop, a settler in Maryland in 1666, tried to attract indentured servants to the colony from England. Alsop promised that “every servant has a Gun, Powder, and Shot allowed him, to sport him withal on all Holidays and pleasurable times, if he be capable of using it, or willing to learn.” Although servants were rarely supplied with guns, the fact that the
provision of guns and time to hunt was used as an incentive makes it clear that these items were valued in England (and in turn America) as early as the Seventeenth century.

Although Michael Bellesiles’ work *Arming America* tried to suggest that firearms were limited in American prior to the American Civil War, it is clear such was not the case. As demonstrated in Figure 1, firearms had spread to nearly every region of North America by 1754. Colonials had an intimate knowledge of guns. When supplies were limited, colonials wanted firearms badly enough to develop local industries of gun production. The early beginnings of industrialism emerged from an affluent British society that wanted more goods than the labour force could produce.\(^{117}\) In like manner, colonial Americans organised industrial centres for the production of firearms because import supplies and local labour forces could not meet demands. But colonial society was not affluent. The cost of sufficiency exceeded the resources available to most households. As Carole Shammus once noted, “To buy land, livestock, seed, and equipment (including plow and field tools, dairy utensils, a cider mill, equipment to manufacture apparel, soap and candle making utensils, and carpenter and cooper tools) involved an outlay of around 145 pounds sterling, a considerable investment for the ordinary person.”\(^{118}\) Thus, colonial demand for firearms indicates that guns held an essential position within colonial society and culture. To put it plainly, America had a gun culture as early as the seventeenth century.
The flurry of discussion over Bellesiles began with the publication of Arming America: The Origins of a National Gun Culture (New York, 2000). Surprisingly, Bellesiles presented much of the scholarship found in Arming America to the historical community years prior to releasing the book but sparked little to no response from historians. In the article “The Origins of Gun Culture in the United States, 1760-1865,” Journal of American History, 83 (1996): 425-455, Bellesiles made statements about gun ownership in early America that should have startled many historians and Early Americanists familiar with the uses of probate materials. Bellesiles’ examination of probate and militia records from the eighteenth and nineteenth centuries indicated guns were so limited in America that gun ownership among the general population was at best exceptional until after the Civil War, which contradicted the widely excepted work of Alice Hanson Jones, American Colonial Wealth: Documents and Methods, 3 Volumes (New York, 1977).

1 The first and most dogged critic of Bellesiles’ argument came from Clayton Cramer, who raised questions about Bellesiles’ sources as well as his claims concerning gun culture first on several list serves (notably H-Net) and then in several written works: “What Clayton Cramer Saw and (Nearly) Everyone Else Missed,” (January 6, 2003) History News Network, George Mason University.; Armed America: The Remarkable Story of How and Why Guns Became as American as Apple Pie, (Nashville, TN: Nelson Current. 2007).


4 Smith


6 Harold E. Selecky, Recruiting in Connecticut During the Seven Years War (Yale: Paper presented at the Shelby Cullom Davis Center Conference on War and Society in Early America, March 11-12, 1983), 4. In War and Society in Colonial Connecticut (Yale University Press, 1990), Selecky makes the point in several places that the American militias were more advanced than European armies because the militia relied entirely on firearms while European military units well into the seventeenth century still relied on pikes as the main weapon since firearms were limited in numbers and expensive.

7 Selecky, War and Society, p. 4. Geoffrey Parker in The Military revolution Revisited: Military innovation and the rise of the West, 1500-1800 (Cambridge University Press, 1988), has several chapters detailing how European nations were slow to shift from pikes and arrows to firearms, largely due to the cost but also because firearms were slow to load and wildly inaccurate. Thus, it was common to see small groups of musketeers guarding squares of pike men, the most effective tool against cavalry charges. But, as time passed and the effectiveness and reliability of firearms became apparent, the pike men were being employed to protect larger units of gun toting infantrymen.


11 Galton Papers, Birmingham Reference Library 405/19 December 1754. See also, Richards, “The Import of Firearms into West Africa,” 45.


Population estimates for the British colonies vary, mainly since an accurate census was never taken. John J. McCusker and Russell R. Menard estimate that the total population grew from 260,400 in 1700 to 1,400,000 in 1760; the Middle colonies from 53,500 in 1700 to 427,900 in 1760; the Chesapeake from 98,100 in 1700 to 502,000 in 1760; and the Lower South from 593,600 in 1760. All regional population figures show drastic increases. New England went from 16,400 in 1700 to 214,100. For more on population figures, see John J. McCusker and Russell R. Menard, _The Economy of British America, 1607-1789_, rev. ed. (1991).


Massachusetts General Court, by resolution, July 8, 1700, noted in Maine Historical Society, _Documentary History_, Second Series, Vol. 23, p 29-30.

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27 Eleanor B. Adams, ed. and trans., _Bishop Tamarion's Visitation of New Mexico, 1760_, (Albuquerque, 1954), 58.
29 Joseph Doddridge, _Notes on the Settlement and Indian Wars of the Western Parts of Virginia and Pennsylvania from 1765 to 1783_ (Pittsburgh, 1893), 34. At least 7 Indian traders killed during the uprising were from the neighboring colonies of Maryland and Virginia; 53 were “licensed” or “unlicensed” Pennsylvania traders; and 17 were merchants whose anxiety to share in the profits of the trade prompted them to go a field in search of peltry. See Warren K. Moorehead, “The Indian Tribes of Ohio,” _Ohio Archeological and Historical Publications_, VII (1899), 43; John Arthur Adams, “The Indian Trader of the Upper Ohio Valley,” _Western Pennsylvania Historical Magazine_ 17 (1934): 164.
32 The number of new arrivals participating in the Indian trade grew substantially over time until warfare of one kind or another disrupted settlement. During the period from 1725 to 1734, there were 34 traders who appeared in the region for the first time; from 1735 to 1744, an additional 34 appear for the first time; and from 1745 to 1754 as many as 112 new names appear. From 1755 to 1764, the new names dropped to 42, probably due to the French and Indian war. From 1765 to 1776 the number dropped further to 29, due to Pontiac’s Rebellion and the various events in connection to the on-coming Revolution. See Adams, “The Indian Trader of the Upper Ohio Valley,” 164.
33 Cornelis Cuyler to Philip Cuyler, 7 September 1756, Cornelis Cuyler Letter Book, American Antiquarian Society.
35 Hamilton, _Colonial Frontier Guns_, 116-117.
37 Drake, _King Philip’s War_, 127.
40 Professional status was and still remains a fluent position within American society. For tables II through IV, the lists of occupations included here under the professional moniker of gunsmith are: gunsmith, armorer, artificer, iron and steel manufactory that made cannon, shot, and similar military supplies, gun stocker, gun barrel maker, gun lock maker, and locksmith. Since I was looking for documentation concerning very specific professional titles, the numbers of gunsmiths listed in the tables might have been higher if the occupation list was expanded. Also, some individuals in documents with an occupation that included them under the moniker of gunsmith were excluded from the figures listed in the tables because I could not find more than one reference.
41 Population estimates for the British colonies vary, mainly since an accurate census was never taken. John J. McCusker and Russell R. Menard estimate that the total population grew from 260,400 in 1700 to 1,400,000 in 1760; the Middle colonies from 53,500 in 1700 to 427,900 in 1760; the Chesapeake from 98,100 in 1700 to 502,000 in 1760; and the Lower South from 593,600 in 1760. All regional population figures show drastic increases. New England went from approximately 92,400 people in 1700 to more than 449,000 in 1760; the Middle colonies from 53,500 in 1700 to 427,900 in 1760; the Chesapeake from 98,100 in 1700 to 502,000 in 1760; and the Lower South from 16,400 to 214,100. For more on population figures, see John J. McCusker and Russell R. Menard, _The Economy of British America, 1607-1789_, rev. ed. (1991).
43 Massachusetts General Court, by resolution, July 8, 1700, noted in Maine Historical Society, _Documentary History_, Second Series, Vol. 23, p 29-30.
46 Massachusetts General Court, by resolution, July 8, 1700, noted in Maine Historical Society, Documentary History, Second Series, Vol. 23, pp. 29-30.
49 Adam Stephen Papers, Manuscript Division, Library of Congress, especially correspondence between Stephen and Anthony Noble for the years 1774 through 1779. See also, Robert D. Mitchell, Commercialism and Frontier: Perspectives on the Early Shenandoah Valley (Charlottesville, 1977), 205.
50 David Ross, Accounts with Rappahannock Forge1782, Point of Fork Arsenal, (Fluvanna County) Records, 1783-1803, Library of Virginia, ACS # APA 174; Virginia, Auditor of Public Accounts, Correspondence, Orders, and Receipts on account, 1779-1864, Accession # APA-17. See also, York, “Clandestine Aid,” 27.
56 A sense of conservation can be found early in the colonial era, although it was not anti-hunter advocacy. Many colonial assemblies passed legislation establishing hunting seasons and stipulating kill limits. When animal populations decreased, legislation limited the hunting of specific species so populations could rebound. Practices like fire hunting, which were viewed as unsportsmanlike, were outlawed in nearly every colony, and sportsman’s code for hunting emerged as early as the 1780s with the anonymous publication of The Sportsman’s Companion; or, An Essay on Shooting. An Essay on Shooting (New York, 1783), reprinted in Altherr, Sports in North America, 304-324.
60 Cronon, Changes in the Land, 133.
61 Peter Kalm, Travels in North America (1753-61, 1770), Adolph B. Benson, ed. (New York, 1964), I, 166.
62 Eastham Town Records, 1695; noted in Earle, Customs and Fashions in Old New England, 37.
Woodcocks (but Snipes, Herons, Bitterns, Eagles, Larks 2 sorts one of w'ch are here all the year round, are
Heath Fowls (called here improperly Pheasants) 2 sorts, wild Pigeons in prodigious great flocks, Field
Ducks, Plover 2 or 3 sorts, Soris (a delicious eating bird in Shape and way of living like y'r Water Rails),
follows: “The four fowls, wild Turkey’s very numerous, Partridges (the size and color like y'r Quails), wild
volumes (Fayetteville, 1985), 54

83 Records of the Superior Council, Louisiana Historical Quarterly, (1920) III, 149-150; Clermont vs Boyer, March 19-April 28, 1770, Spanish Judicial Records, Louisiana Historical Center, New Orleans.
82 Daniel H. Usner, Jr., “The Frontier Exchange Economy of the Lower Mississippi Valley in the
Eleventh Century,” William and Mary Quarterly V44/3s/2i (April, 1987): 186.
80 Daniel H. Usner, Jr., “The Frontier Exchange Economy of the Lower Mississippi Valley in the
Eleventh Century,” William and Mary Quarterly V44/3s/2i (April, 1987): 186.
79 Tober, Who Owns the Wildlife, 56-57.
78 The total value of the skins amounted to between £120 and £150, with the deerskins alone worth over £100. Deerskins were worth about 2s each, raccoon skins 6d, otter pelts about 6d per pound, beaver pelts 3d per pound, and elk hides between 10s and 15s each. See, Preston papers, Jan 23, 1744-April 5, 1749, Virginia Historical Society.
75 Usner, Indians, Settlers, & Slaves in a Frontier Exchange Economy, 160-161.
74 Tober, Who Owns the Wildlife, 52-53.
73 William Bartram, Travels through North and South Carolina, Georgia, East and West Florida, the Cherokee Country, the Extensive Territories of the Muscogulges or Creek Confederacy, and the Country of the Choctaws (1791), ed. Francis Harper (New Haven, 1968), 269.
as big as Quails, the other are seen only in winter and are much like your lark.” See, John Clayton to Samuel Durrent, March 21, 1739, *Virginia Magazine of History and Biography* VII (1899), 172-174.

87 Each was a professional huntsman who led pleasure hunts attended by Jacob Hiltzheimer as noted in his diary. See Jacob Cox Parsons, ed., *Extracts from the Diary of Jacob Hiltzheimer* (Philadelphia, 1893), 9-24.

88 Clayton to Durrent, 21 March 1739, *VMHB* 7 (October 1899), 173-174.


90 Harold E. Selecky, Recruiting in Connecticut During the Seven Years War (Yale University: Paper presented at the Shelby Cullom Davis Center Conference on War and Society in Early America, March 11-12, 1983), iii.


92 Various primary sources address this problem. George Washington often complained that a militiamen arrived at his camp unarmed, see Washington to Gov. Jonathan Trumball, Feb. 6, 1777, *Collections of the Massachusetts Historical Society*, 5th series (1888), 10:35. When detachments from two regiments of the Essex County, New Jersey, militia mustered into service in 1797, only 57% brought guns, even though 97% of the men in the brigade who attended muster six weeks earlier had come with guns. Virginia had similar problems, see also Col. Thomas Barbour to Col. Davies, Nov. 17, 1781, in William Palmer, ed., *Calendar of Virginia State Papers*, 11 Volumes (Richmond, 1875-1893), 2:607; Col. Lewis Burwell to Gov. Nelson, July 30, 1781, 2:270; and Col. Richard Elliot to Gov. Jefferson, Nov. 7, 1780, 1:385.


94 Harold E. Selecky, Recruiting in Connecticut, 4.

95 Militia Returns 1777-1784 (Accession 36929), State Government Records, Library of Virginia.

96 Daniels, *Puritans at Play*, 168.


103 Albert Berry Saye, “Was Georgia a Debtor Colony?” *Georgia Historical Quarterly* 24 (1940): 323-352.


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**Thesis**
