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Gunflints and Musket Balls: Implications for the Occupational History of the Eaton Site and the Niagara Frontier

Michael Roets, William Engelbrecht, and John D. Holland

The multicomponent Eaton site in West Seneca, New York, was the focus of a long-term archaeological project. While the major emphasis was the excavation of a mid-16th-century Iroquoian village, all artifacts are being analyzed. These include 12 gunflints and 8 musket balls deposited at some point after the abandonment of the Iroquoian village. This article describes these objects, their distribution and dating, and the implications of these artifacts for the history of the site and the region.

Le site à occupations multiples de Eaton à West Seneca, New York, a fait l'objet d'un projet archéologique d'envergure échelonné sur plusieurs années. Bien que l'accent ait surtout été mis sur la fouille d'un village iroquoien du XVIe siècle, tous les artéfacts trouvés sont en cours d'analyse. Il y a notamment douze pierres à fusil et huit balles de mousquet déposées après l'abandonnement du village iroquoien. Cet article décrit ces objets, leur distribution et leur datation, ainsi que les implications de ces artéfacts pour l'histoire du site et de la région.

The Eaton Site

The Eaton site (A029-25-0003) is in West Seneca, New York, on a terrace some 17 ft. above nearby Cazenovia Creek (FIG. 1). At the turn of the 20th century the site was located on both the Eaton and Schaub farms. The northeastern portion of the site was destroyed by gravel mining in the 1960s, and the remaining eastern portion of the site was destroyed by construction of a nursing home in the early 1970s. The Eaton site was chosen for excavation in 1975 in part due to a concern that it might undergo additional development further destroying the site. The major portion of the site which remains is now owned by the Archaeological Conservancy.

The site was occupied intermittently from late Paleoindian times (Smith, Engelbrecht, and Holland 2010) through the mid-16th century, when it was the location of an Iroquoian village (Engelbrecht 1994, 2011, 2014; Salisbury 2001; O'Donnell 2003; Jenkins 2004; Poplawski, Kwoka, and Engelbrecht 2012). During the Buffalo Creek Reservation period, ca. 1780–1842 (FIG. 2), there was a Native American cabin on the site (Houghton 1909: 285, 343; Engelbrecht et al. 2008).

In 1842 the area of the Eaton site was included in a land purchase by the Community of True Inspiration, a religious group from Germany, and its members founded the settlement of Ebenezer in what is

now West Seneca (Pace 2012). They were a communal farming society, but it is not known whether they farmed the area of the site. A stone boundary marker erected by the "Ebenezers" was stolen from the western edge of the site in the 1980s. In 1855 the Ebenezers moved to Iowa, where they established the village of Amana. Following the sale of Ebenezer lands, a property line bisected the site, and farming became the major activity during the last half of the 19th century and first half of the 20th.

Between 1975 and 2000, William Engelbrecht directed 17 summer archaeological field schools on the site. Eight field schools were for SUNY Buffalo State, three were for SUNY at Buffalo, and six were joint field schools involving both institutions. The field schools resulted in the excavation of 257, 2 × 2 m units. All soil from these units was passed through 6 mm mesh screens. The material from these excavations is curated at SUNY Buffalo State.

Twelve gunflints and eight musket balls were recovered, but no other gun parts have been identified from these excavations. While the gunflints and musket balls postdate the mid-16th-century Iroquoian village occupation, it is not known when they were deposited. They were examined to determine whether they: (1) predate the 1780 settlement of Buffalo Creek by the Hodinöhsö: ni' (Six Nations), (2) are contemporaneous with the Buffalo Creek



Figure 1. Map of New York with the location of the Eaton site. (Map by Mary Perrelli, 2011.)

cabin (ca. 1780–1842), or (3) relate to the Ebenezer ownership of the property (1843–1855).

Gunflints

Of the 12 gunflints, two were found in one unit (36N 13W), and the remainder were found scattered over a wide area of the site (FIGS. 3 and 4) (TAB. 1). All were found in the plowzone. Four of these gunflints were made from Onondaga chert, suggesting that they were manufactured by Native Americans with knowledge of local sources. Onondaga chert predominates in earlier archaeological assemblages in the area, and there is a source less than a mile from the site. Two of these gunflints were bifacially knapped with the same techniques used to make projectile points and knives. The other two were chipped unifacially, producing an end product very similar to a European gun spall. These two different techniques may reflect temporal change, with the unifacial gunflints being manufactured at a later time.

In the northeast, bifacial gunflints are believed to have been made by Native Americans as early as 1625 (B. Kent 1983: 33; Luedtke 1999a: 33). In southwest Pennsylvania, the Johnson locus (36WM705) (ca. 1640-1660) is believed to be a Seneca hunting camp from which 14 native-made bifacial gunflints were recovered (Beckman 2013). Gun parts are reported from the Seneca villages of Power House and Steele (ca. 1650), and bifacial gunflints appear on Seneca village sites shortly thereafter, until the disruption of the Seneca sequence with the attack by French forces under De Nonville in 1687 (Hamilton 1982; B. Kent 1983: 30; Engelbrecht 2003: 116). The use of bifacial gunflints decreases after 1675, and by 1700 they are rare (B. Kent 1983: 34). At Fort Niagara, of 219 gunflints recovered between 1979 and 1991, only one was bifacial (Utley and Scott 2007). Kenmotsu (1990: 97) suggests a rapid shift by native people to European gunflints once they were available.

Abandonment of native flint working in general appears to have been both gradual and situational (Cobb 2003). The use of bifacial gunflints persisted in the upper Missouri until the end of the 18th century (Witthoft 1966: 24; B. Kent 1983: 33; Luedtke 1999a: 33). John Triggs, working at Ruthven National Historic Site on the lower Grand River near Cayuga,

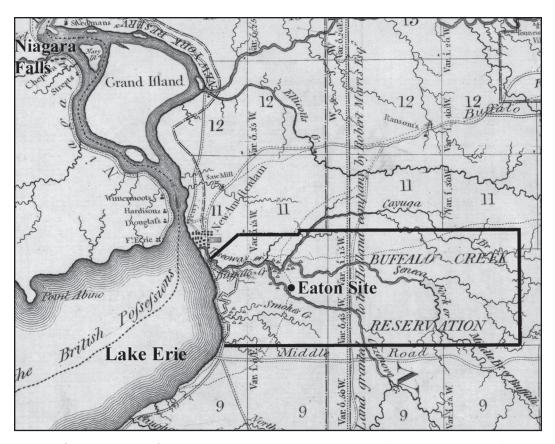


Figure 2. The Niagara region shown on an 1804 Holland Land Company Map (Ellicott and Ellicott 1804). Labels for Lake Erie and the Eaton site were added by the authors.

Ontario, found an Onondaga chert spall gunflint on a late 18th- to early 19th-century Delaware site (Gary Warrick 2011, pers. comm). Also, recent research on a late 18th- to early 19th-century Nipmuc household in the vicinity of Boston, Massachusetts, indicates the reworking of gunflints, as well as the reworking of lithic materials from an earlier occupation (Bagley 2013), suggesting native retention of flint-knapping skills into the early 19th century.

Six specimens of non-local material at Eaton are European spall gunflints. Their manufacture in western European countries began after 1600 (De Lotbiniere 1984; Luedtke 1999a: 33–35; Roets 2002: 11). One gunflint fragment likely represents a gun spall as well. This fragment (E901) and one complete gun spall (E1017) are the honey color typical of French gunflints. Gun spalls were replaced by blade type gunflints in France after 1660 (De

Lotbiniere 1984; Luedtke 1999a: 35–36). Five of the gun spalls from Eaton were made of either English or other European flint. Gun spalls continued to be made in England until at least 1775 (De Lotbiniere 1984), and Hamilton (1980: 141) suggests that the blade type (also referred to as a "flake" or platform type) was not made by the English in large quantities until the 1790s.

Blade gunflints made from high-quality Brandon flint were made beginning in 1790 (De Lotbiniere 1977: 45), and these became the predominant gunflint manufactured in England. One of the gunflints from the Eaton site (E1170) is a blade type. Its shape and form are characteristic of English gunflints. However, the material is a gray flint rather than the Brandon flint commonly used after 1790, suggesting it was likely manufactured between 1775 and 1790.

Two of the gunflints recovered from Eaton (English or European gun spalls) appear to

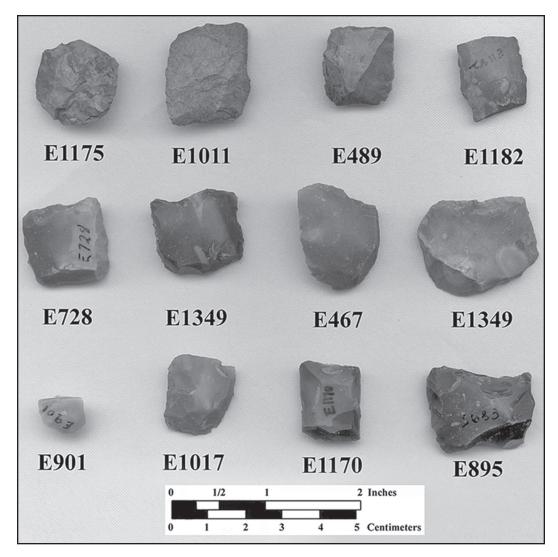


Figure 3. Eaton site gunflints. Top row gunflints are all Onondaga chert: E1175 and E1011 are bifacial; and E489 and E1182 are gun spalls. Middle row: gun spalls of English/European origin. Bottom row: E901 is a gun-spall fragment and E1017 is a gun spall, both are of French/European origin.; E1170 is an English blade gunflint; and E895 is a gun spall of English/European origin. (Photo by Michael Roets, 2011.)

have been used as fire flints (E467, E895), as they exhibited edge concavities and localized edge battering (Mason 1986: 193). Hanson (1970: 53) suggests that gunflints were reused as tinder flints when they broke or wore out. Kurt Jordan (2011, pers. comm.) found that gunflints recovered from Seneca graves dating to between 1688 and 1754 were overwhelmingly associated with iron strike-a-lights. This pattern suggests that, for Seneca sites of this period, gunflints were used for fire starting at the end

of their use life. Lantz (1980: 35) describes four blade (prismatic) gunflints of English flint from a Seneca cabin site along the Allegheny River dating between 1790 and 1869, and suggests that their final use was on fire steel. Gary Warrick (2011, pers. comm.) reports finding, at an 1826 Mississauga encampment near Brantford, Ontario, a possible gunflint of Onondaga chert that was apparently used as a fire starter. The low proportion of gunflints used as tinder flints at Eaton is surprising.

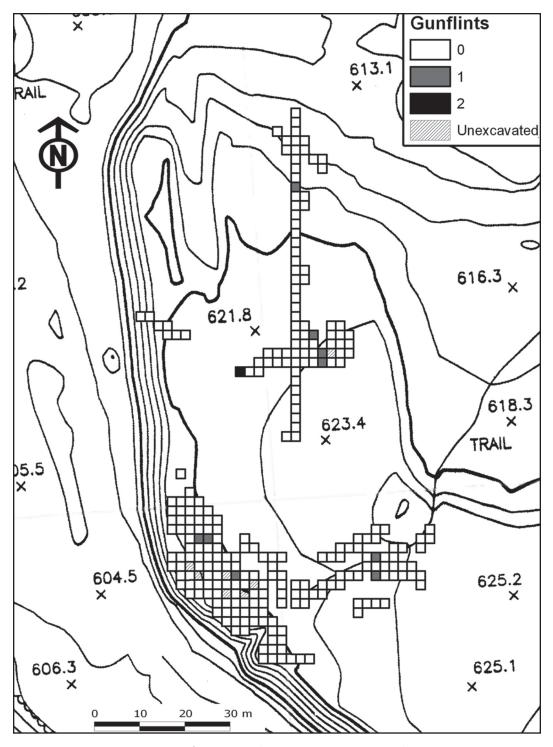


Figure 4. Distribution of gunflints on the Eaton site. (Figure by Rod Salisbury, 2011.)

Table 1. Eaton site: gunflint analysis and descriptions

Specimen context	Length (mm)	Width (mm)	Thickness (mm)	Color	Proposed source	Type/reduction comments	Use wear comments
E1175 40N 5E Lv. 1	24	23	9	Mottled gray	Onondaga Chert	Bifacial gunflint (tradegun, rifle)	Evidence of firearm usewear
E1011 38N 5E Lv. 1	26	23	9	Mottled gray	Onondaga Chert	Bifacial gunflint (tradegun, rifle)	No evidence of firearm usewear, prob- ably discarded because of asymmetry
E489 8S 17E Lv. 2	21	19	5	Mottled gray	Onondaga Chert	Gunspall with some trimming (pistol, tradgun, rifle)	Minimal to none
E1182 44N 3E Lv. 2	21	19	5	Mottled gray	Onondaga chert	Gunspall (pistol, tradegun, rifle)	Working edge appears to be completley snapped off with one step fracture
E728 0N 20W Lv. 1	22	22	9	Mottled gray	European/ English	Gunspall with trimmed and rounded heel and sides (tradegun, rifle)	Blunted working edge evidence of firearm usewear on 2 sides
E1349 36N 13W Lv. 2	22	23	7	Mottled gray	European/ English	Gunspall with timmed and rounded heel and sides (tradegun, rifle)	Blunted working edge evidence of firearm use- wear
E467 4S 17E Lv. 1	30	22	5	Mottled gray	European/ English	Gunspall with trimmed and rounded heel and sides (tradegun, rifle)	Heavy use as a fire flint
E1349 36N 13W Lv. 2	28	30	5	Mottled gray	European/ English	Gunspall with trimmed and rounded heel and sides (tradegun, rifle)	Blunted working edge evidence of firewarm usewear
E901 8N 26W Lv. 2	13	10	3	Gray to honey- color	European/ French	Gunspall frag- ment?	N/A
E1017 8S 14W Lv. 1	21	19	7	Gray to honey- color	European/ French	Gunspall with trimmed and rounded heel and sides (pistol, tradgun, rifle	Some evidence of firearm usewear on working edge

Table 1. Eaton site: gunflint analysis and descriptions. (continued)

Specimen context	Length (mm)	Width (mm)	Thickness (mm)	Color	Proposed source	Type/reduction comments	Use wear comments
E1170 76N 1W Lv. 2	21	17	6	Mottled gray	English	Blade gunflint (pistol, tradegun, rifle)	Evidence of firearm usewear on 1 edge, form of English style blade gunflints
E895 0N 22W Lv. 1	23	29	9	Dark gray	European/ English	Gunspall with trimmed and round- ed heel and sides (tradegun, rifle)	Very heavy evidence of fire flint usewear on 2 sides

Perhaps the abundance of chert from earlier occupations on Eaton and the nearby source of Onondaga chert provided ready alternatives for fire starters.

Musket Balls

Eight lead balls were recovered from the plowzone (TAB. 2) in the southern portion of

Table 2. Eaton site musket ball descriptions

Specimen context	Diameter (inches)	Comments
E964 14S 14W Lv. 1	.56	Lead, unfired, tradegun or rifle, mold seam and casting sprue visible
E6 2S 18W Lv. 1	.54	Lead, unfired, tradegun or rifle, mold seam and casting sprue visible
E608 2S 18 W Lv. 1	.57	Lead, unfired, tradegun or rifle, appears to have been surgically removed but more likely heavily rodent chewed
E15 4S 18W Lv. 2	.54	Lead, unfired, tradegun or rifle, mold seam and casting sprue visible
E1021 4S 14W Lv. 2	.53	Lead, unfired, tradegun or rife, mold seam and casting sprue visible
E822 2S 9E Lv. 1	Approx. .57	Lead, fired and impacted, tradegun or rifle, has rifling marks
E2000 2N 26 W Lv. 1	Approx. .47	Lead, fired and impacted, tradegun or rifle, has rifling marks
E292 18S 16W Lv. 1	.40	Lead, unfired, tradegun or rifle, mold seam and casting sprue visible

the excavation (FIG. 5). They range in size from 0.40 to 0.56 in. in diameter, suggesting their use in small long arms, such as rifles and smoothbore carbines or trade guns. Six were unfired, having the mold seam and casting sprue visible (Sivilich 2005). No faceting was observed, which can occur when shot is packed together (Sivilich 1996: 103). None is of the extended-sprue type brought from Europe

to the colonies, such as are found on the Dann, Marsh, and Wheeler Seneca sites dating ca. 1655–1675 (Daniel Sivilich 2013, pers. comm.). The extended sprue was used as a tie point on early musket balls to secure them within a paper cartridge (Sivilich 2009: 95).

The surface of one of these unfired pieces appears to have been chewed by a rodent. Sivilich (2009: 93) observed a similar rodentchewed musket ball from a Revolutionary War battlefield site in New Jersey. All unfired specimens were concentrated in the southwestern portion of the excavated area where there was a concentration of early 19th-century domestic refuse. Two specimens exhibit rifling marks, suggesting they were fired from rifles. One was on the northern periphery (2N 26W), and the other fired specimen was on the eastern periphery (2S 9E) of the musket-ball distribution.

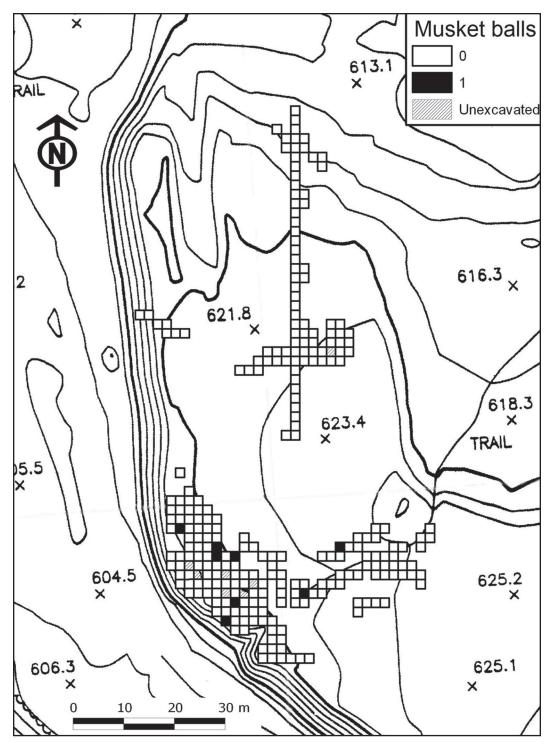


Figure 5. Distribution of musket balls on the Eaton site. (Figure by Rod Salisbury, 2011.)

The chemical composition of all these specimens is described in Engelbrecht et al. (2008: 73–74).

The Niagara Frontier: 1550-1780

In the 16th century there were two contemporaneous Iroquoian villages located south of Buffalo separated by approximately 10 mi. These villages are assumed to have moved a few miles every 10–20 years. It is likely that the inhabitants of the Iroquoian village at Eaton moved to the Green Lake site in Orchard Park, then to either the Smoke's Creek or Ellis sites, and finally the Kleis site, which was abandoned around A.D. 1640 (White 1961; Allen 1988). All of these sites are within 7 mi. of Eaton. It is likely that inhabitants of these villages would have regularly visited the abandoned village site at Eaton.

The ethnic identity of the inhabitants of the Iroquoian component at Eaton and other village sites in the Niagara Frontier remains a subject of conjecture (Engelbrecht 1991). On some late 17th-century maps, the area of these sites is marked "Kahkwah" (or variants), along with the notation, "nation destroyed" (Pendergast 1994). Kahkwah was a Seneca term, but whether it referred to the Erie, Neutral, or Wenro is uncertain. These groups were defeated by the Hodinöhsö: ni' in the mid-17th century, who then absorbed an unknown number of individuals from these populations. Following the defeat of the Erie, Neutral, and Wenro, the Niagara Frontier became contested ground for a number of native nations. Parker (1967: 48) suggests that the Seneca allowed some Erie to remain along the Cattauragus some 30 mi. south of Eaton.

The Seneca came to the Niagara Frontier to fish and crossed through to hunt and fight their enemies, but before 1675 any Seneca in the Niagara Frontier faced attack from the Susquehannock (D. Kent 1974: 35). On a map attributed to the Abbé Claude Bernou, published ca. 1680, there is a notation that the shores of Lake Erie and the western end of Lake Ontario "are infested with Ganostogeronons [Susquehannock] which keeps the Iroquois away" (D. Kent 1974: 17). After 1684 the Illinois, Miami, Ottawa, and other western nations were fighting the Seneca, and these western nations were sometimes to be found in the Niagara Frontier (D. Kent 1974: 17–19).

After 1701 the French seized control of the Niagara region, and Louis Thomas Joincaire developed an active trade with the Seneca and other nations near present-day Lewiston, at the foot of the portage around Niagara Falls. This is approximately 30 mi. north of the Eaton site. By 1718, there was a small village of about ten cabins at Lewiston, where Seneca were living and working as porters moving goods over the portage (D. Kent 1974: 69). When Peter Kalm visited there in 1750, this settlement had grown to over 200 individuals belonging to the Hodinöhsö: ni' (D. Kent 1974: 113). Historical records indicate that after 1750 large quantities of European goods were moving over the portage and on to Fort Petite Niagara at the southern end of the portage around Niagara Falls. By this time Fort Niagara at the mouth of the Niagara River was an important source of provisions for many native nations (D. Kent 1974: 148).

Possibly as early as 1741 a Seneca chief and his followers lived at "the Little Rapids" in modern Buffalo, where the Niagara River flows from Lake Erie. This village was near a prime fishing spot and was approximately 8 mi. from the Eaton site via the Buffalo River and Cazenovia Creek. While the chief and 38 others left in 1751, an unknown number of individuals stayed (D. Kent 1974: 111–112). John Kenjockety is reported to have had a cabin along Scajaquada Creek before 1780 (Marshall 1857: 304) near the Little Rapids. He was said to be the grandson of a Kahkwah captive of the Seneca (Marshall 1857: vii; Parker 1919: 314).

In 1756 Daniel de Joncaire-Chabert established a trading post near the mouth of the Buffalo River where some Hodinöhsö: ni' settled, only about 6 mi. from Eaton. This post lasted until the British defeat of the French in 1759. Then in 1764 the British built Fort Erie in what is now Ontario, across the river from Buffalo. This fort served as a supply depot for goods that were to be moved to the upper Great Lakes. Like the earlier French, the British imported quantities of gunflints and lead ball and shot, much of which likely found its way to native peoples frequenting the area.

Buffalo Creek Territory: 1780-1842

Following displacement from much of their core territory during the American Revolution, Hodinöhsö: ni' sought refuge at Fort Niagara. After enduring a harsh winter under crowded conditions in 1779–1780, many resettled along Buffalo Creek and its tributaries in the spring of 1780. Buffalo Creek officially became a reservation following the Treaty of Big Tree in 1797. Houghton (1920: 10, 116) describes the settlement pattern on Buffalo Creek as dispersed, with most domestic structures isolated from one another and located on a terrace above a creek. The territory was sold in 1842 in response to pressure from the surrounding white population.

The setting of the cabin at Eaton fits the pattern described by Houghton. He also noted that a late 18th-century coin was found on the site (Houghton 1909: 285, 343). Historical artifacts recovered by the field school excavations include a Lesslie twopence or half-penny token issued sometime between 1824 and 1830 by a Toronto druggist and bookstore proprietor (Charlton 1977: 30), likely reflecting Hodinöhsö: ni' cross-border movement. Excavation also yielded transfer-printed pearlware manufactured between 1795 and 1840 (identified by Kathryn Leacock and Elizabeth Peña). The early 19th-century materials have not yet been tabulated or spatially plotted, but they are clustered in the southwestern units. It is assumed the native cabin was near this scattering of early 19thcentury material. Some houses at Buffalo Creek were described as huts with dirt floors and bark porches (Karas 1963: 59–60). If the house at Eaton was of this type, traces of it may not remain in what is now the plowzone.

An Onondaga chief, Big Sky, established a village ca. 1780 along Cazenovia Creek approximately a mile upstream from the Eaton site. Proctor (1876: 591) states that in 1792 the village consisted of around 28 cabins, and Dearborn (1904: 57) describes a council house 20 × 60 ft. Currently, a New York State historical marker near the intersection of Seneca Street and Ridge Road notes the approximate location of Big Sky's village. Given the dispersed nature of settlement on Buffalo Creek and the proximity of the Eaton cabin to Big Sky's village, the most likely inhabitants of the Eaton cabin would have been Onondaga. This suggestion is strengthened by the discovery of a possible fragment of ritual paraphernalia characteristic of the Onondaga (Engelbrecht et al. 2008: 76).

Abner Gilbert, a captive at Buffalo Creek in the early 1780s, mentions that the distance to Fort Niagara prevented frequent trips there for provisions (Walton 1784: 55). However, the Gilbert narrative does mention that Thomas Peart, another captive, brought rum, salt, and ammunition from Fort Niagara to Buffalo Creek (Walton 1784: 77). The British at Fort Niagara also brought provisions to Buffalo Creek in the early 1780s (Walton 1784: 55, 86–87).

In her master's thesis, Faith Karas (1963) examined annuity payments made to the Six Nations. Buffalo Creek became the center of this distribution. She notes that in 1791, 200 lb. of powder, 400 lb. of lead, and 200 gunflints were given to the Six Nations (O'Reilly 1791 as cited in Karas 1963). In 1792, 500 lb. of powder, 1,000 lb. of lead, and 2,000 gunflints were received, and in 1793 the Six Nations received the same quantities of powder and lead as in 1792, as well as 1,000 gunflints Nations (O'Reilly 1792 as cited in Karas 1963).

Discussion

The distribution of musket balls is restricted to the southern units, where most of the early 19th-century domestic debris was also found. The overlapping distribution of unfired musket balls and early 19th-century domestic refuse suggests, but does not demonstrate, the contemporaneity of these materials. The lack of an extended sprue on any of the specimens, such as are found on Seneca sites between 1655 and 1675, argues against a date earlier than 1675 for the musket balls.

Unlike the musket balls, the gunflints are scattered over the entire area of excavation, so discard of these items occurred both in the vicinity of the native cabin and at some distance removed. Three of the four gunflints made of local chert were found north of the area where the musket balls and early 19th-century domestic refuse were found.

Projectile points from late Paleoindian through Middle Woodland times testify to the desirability of the site over the millennia as a temporary camp. The clearing left as a result of the Iroquoian village would have further enhanced the location in the years that followed. Deer would have been attracted to the clearing, and nut trees, berry patches, and other useful plants could have expanded into

previously occupied or cultivated areas (Engelbrecht 2003: 104–105). Jerusalem artichokes, for example, are an invasive plant that frequently grew in Iroquois cornfields (Parker 1968: 106). The potato-like tuber can be harvested in the late fall and eaten or stored for later consumption.

The two bifacial gunflints of Onondaga chert most likely date between 1625 and 1690. The gun spall and gun-spall fragment of honey-colored French flint were most likely manufactured between 1600 and 1660, a timespan that overlaps with the period of use of native-made gunflints in the northeast. Inhabitants of the Niagara Frontier before 1650 could have discarded the native-made gunflints or French spall gunflints when hunting or camping on the site. After the 1650s there were no known permanent native or European American occupations in the immediate vicinity of the Eaton site until the settlement of the Buffalo Creek Territory in 1780. However, Seneca, Susquehannock, Illinois, Miami, and individuals from other nations passed through western New York and could have hunted or camped on the site. The Seneca are the most likely to have been using Onondaga chert for gunflints since it also occurs in their homeland some 55 mi. to the east.

After the defeat and dispersal of native peoples to the west of the Seneca in the mid-17th century, the Seneca and other Hodinöhsö: ni' ranged over a wide geographic area. If the Johnston locus in southwest Pennsylvania, with its 14 bifacial gunflints, is used as a model for a mid-17th-century Seneca hunting camp, one would expect few if any items of European manufacture. At the Johnson locus there were chert humpbacked knives and chert triangular points, but no European goods (Beckman 2013). At Eaton it would be difficult to distinguish the remains of such a camp from the earlier Iroquoian village, except for the presence of native-made bifacial gunflints.

The five English or European spall gunflints were likely manufactured between 1600 and 1775 (De Lotbiniere 1984; Luedtke 1999a: 33–35), a span of 175 years. Thus, they could have been discarded in either the 17th or 18th century. In the mid-18th century inhabitants of the Little Rapids site (8 mi. away) or Joncaire's trading post at the mouth of the Buffalo River could have hunted, camped, and discarded gunflints on the site.

Regarding the Buffalo Creek Territory, Houghton noted: "It seems more than a mere coincidence that the Seneca settlements grew up on, or in very close proximity to, ancient village sites" (Houghton 1909: 285). He further suggested that these village locations may have been remembered and perhaps intermittently visited before the establishment of Buffalo Creek. The Buffum Street site in south Buffalo was the location of the Iroquoian village that likely preceded the mid-16th-century village at Eaton. It was surrounded by an earth ring that was still visible in the 1840s when Schoolcraft mapped the ring and a mound it enclosed (White 1961: 60). The fact that the Buffalo Creek Cemetery was established within this earth ring supports Houghton's contention that residents of the Buffalo Creek Territory were aware of earlier village sites. The presence of a mound, an earth ring, and an historical period cemetery in the same place suggests that this site (now Seneca Indian Park) was long recognized as a spiritual place on the landscape.

The one English blade gunflint was probably manufactured between 1775 and 1790 (De Lotbiniere 1977: 45). This overlaps with the beginning of the settlement of Buffalo Creek in 1780. This gunflint could have been secured from either Fort Niagara or Fort Erie, or it could have been part of an annuity payment made by the U.S. government at Buffalo Creek. Given the large number of gunflints in the annuity payments delivered to the Six Nations at Buffalo Creek in 1792 and 1793, it is surprising that there are not more gunflints from this period on the site. Two different reports from the 1820s indicate that the goods received at Buffalo Creek from the U.S. government were of inferior quality. The U.S. Secretary of War noted this on a tour in 1820 (Morse 1822: 56–57n), and in 1823 three Seneca chiefs complained of this to the secretary of war in Washington (Lankes 1964: 18). It is therefore possible that the gunflints used in annuity payments were considered to be of an inferior type (Luedtke 1999b) and were not used or were of an older type. In contrast, the soldiers at nearby Fort Niagara were well supplied with blade gunflints as indicated by the 31 recovered from a War of 1812 period trash pit. Fourteen of these were English blade-type gunflints of black Brandon flint, and seventeen were French blade-type gunflints (Roets 2002).

In comparison to the Buffalo Creek occupation at Eaton, Ehler was a Miami site founded at the forks of the Wabash River in Indiana sometime between 1804 and 1809. It was abandoned and destroyed in 1812 (Mann 1999: 417). Thirteen whole and nine partial gunflints were recovered. None of the gunflints is of local chert. The whole gunflints are as follows: "9 British blade gunflints, 1 British spall gunflint, 2 French blade gunflints, and 1 French spall gunflint" (Mann 1999: 417). British blade gunflints do not appear on North American sites much before 1800 (B. Kent 1983: 38–39; Mann 1999: 417).

The presence of French spall gunflints at the tightly dated Ehler site points to their use long after 1660, the date at which it is generally believed that manufacture ceased. As Carl Benn (2011, pers. comm.) cautioned, gunflints do not "go bad," and old stock can be used years after manufacture. Benn notes, for example, that in 1812 American soldiers at Queenston Heights used ammunition that, to a large degree, was older than they were. However, the Eaton gunflint assemblage, with only one English blade-type gunflint, has more early gunflint types than the Ehler assemblage or the War of 1812 trash pit at Fort Niagara. This is in contrast to the domestic refuse recovered from Eaton that points to occupation well into the 19th century.

Karas (1963: 39) notes that the amount of ammunition paid in annuities decreased over time. She speculates that this may be in direct proportion to the amount of hunting being done. Even in 1792 Proctor (1876: 581) characterized the inhabitants of Buffalo Creek as "indifferent in their huntings" because of the availability of supplies from the British at Fort Erie. By 1844 Schoolcraft (1846: 199) lists only six part-time hunters in his census of Buffalo Creek. It is possible that the cabin site at Eaton was occupied when hunting was in decline at Buffalo Creek, and fewer gunflints were sent. The expansion of Buffalo would have eliminated hunting territory immediately north of Buffalo Creek. Percussion caps are introduced after 1820, gradually replacing the earlier flintlock system. While it is not known whether percussion caps were used by inhabitants of the cabin at Eaton, the loss of hunting territory after 1820 and the lack of any other identifiable gun parts from the site suggest that hunting was not important to inhabitants of the site after 1820.

Conclusions

The musket balls and the English blade gunflint were likely discarded by the occupants of the Buffalo Creek period cabin. Establishing the location and occupation span of this cabin remains a project for future research. The probable date of manufacture of the other gunflints suggests earlier occupations, most likely seasonal hunting camps. The two bifacial gunflints of Onondaga chert may have been deposited by the inhabitants of the Niagara Frontier before their dispersal in the mid–17th century, or by individuals from a variety of nations frequenting the region during the latter part of the 17th century. The spall gunflints of local chert and European flint do not provide tight chronological markers, but likely reflect Hodinöhsö: ni' presence prior to the settlement of Buffalo Creek. While there were no permanent settlements in the immediate vicinity of Eaton between ca. 1650 and 1780, this does not mean that the area was abandoned. Instead, the presence of spall gunflints likely serves as a record that the area was visited and used.

In the 17th and 18th centuries Hodinöhsö: ni' spatial mobility and geographical knowledge, and their establishment of settlements in strategic areas, facilitated their political and economic ends (Parmenter 2010). Seneca use of the Niagara Frontier for hunting and fishing in the 18th century paved the way for what Jordan (2013) has described as Hodinöhsö: ni' colonization. The village at the portage around Niagara Falls in Lewiston and the Little Rapids site in what is now Buffalo are examples.

When the Hodinöhsö: ni' resettled at Buffalo Creek after moving from Fort Niagara in the spring of 1780, some were doubtless familiar with the area from hunting and fishing there, while others had lived at Seneca colonies in the Niagara Frontier or at Joncaire-Chabert's trading post at the mouth of the Buffalo River. A few, like John Kenjockety, may have traced their ancestry back to the indigenous Kahkwas. O. H. Marshall (1857: 311) states that John Kenjockety argued with Joseph Brant at Fort Niagara in favor of Hodinöhsö: ni' settlement in western New York. Alyssa Mt. Pleasant (2007: 37–40) cites oral tradition to understand the move of Hodinöhsö: ni' to

Buffalo Creek. While Hodinöhsö: ni' were forced to flee some of their core areas in the wake of the Sullivan-Clinton campaign during the Revolutionary War, the move to Buffalo Creek can be viewed as a move into what was already considered Hodinöhsö: n' territory.

The resettlement of the Niagara Frontier by Iroquoians parallels the resettlement of the St. Lawrence by Mohawk and Oneida in the 18th century (Engelbrecht 2004: 131-133). In the latter case, some St. Lawrence Iroquoians joined the eastern Hodinöhsö: ni' in the 16th and early 17th centuries, while others joined the Wendat (Huron). The mid-17th century defeat of the Wendat by the Hodinöhsö: ni' resulted in the incorporation of some survivors. Some of these Wendat may have had St. Lawrence Iroquoian ancestors. When Mohawk and Oneida settled on the St. Lawrence it seems likely some had St. Lawrence Iroquoian ancestors. In both western New York and the St. Lawrence River valley Hodinöhsö: ni' settlement expansion in the 18th century can be seen as a move back to ancestral Iroquoian territory, in part by descendants of people who had once lived there.

The lack of gunflints typical of the early 19th century suggests that hunting and/or warfare was not an important activity, at least for the inhabitants of the Buffalo Creek period cabin at Eaton or the Ebenezers who followed them. The growing village of Buffalo lay immediately north of Buffalo Creek Territory. Settlers and goods flowed into Buffalo and surrounding areas in the early 19th century, decreasing both the need and the opportunity for local hunting. This would have been increasingly true after the completion of the Erie Canal in 1825. The dearth of gunflints characteristic of the early 19th century would seem to reflect the increasing urbanization of the region and the changing world of Buffalo Creek.

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