GUNSPALLS FROM THE HUDSON’S BAY COMPANY

NEW SEVERN POST (1685-1690)

David Christianson

ABSTRACT

As analysis of the gunspalls from the New Severn post and period documentation indicates a French origin for these early Hudson's Bay Company gunflints.

INTRODUCTION

The New Severn fur trade post archaeological site (GlIw-1) is located on the south bank of the Severn River approximately 5 kilometers upriver from the present Cree community of Fort Severn (Fig. 1). A portion of this site was excavated in the summer of 1978 as part of a project examining problems in the ethnic identification of early fur trade posts on Hudson Bay (Christianson 1980).

The New Severn trade post was in operation from 1685 until its destruction by fire in 1690. While never a major post within the Hudson's Bay Company trading network, two aspects of this archaeological site make it important to fur trade material culture studies. First, the site is known to represent a single occupation by Hudson's Bay Company personnel. An adjacent French trade post Nieu Savanne, in operation between 1700-1704, is spatially separated from the New Severn post. Secondly, the site reflects fur trade activities within a short, defined temporal period (1685-1690).

Gunflints from the New Severn site, then, can be dated to the latter part of the seventeenth century and attributed to use and trade by the newly formed Hudson's Bay Company. This paper presents a description of the New Severn gunflints assuming that they represent gunflints in general use by the Hudson's Bay Company at the time. In addition, period documentation indicates a French origin for these early Hudson's Bay Company gunflints.

THE NEW SEVERN GUNFLINT SAMPLE

There are 69 gunflints in the present sample sufficiently complete to measure length and width attributes. In addition, there are incomplete gunflints, lithic cores and lithic flakes.

<table>
<thead>
<tr>
<th>Complete gunflints</th>
<th>Incomplete gunflints</th>
<th>Lithic flakes</th>
<th>Lithic cores</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>69</td>
<td>150</td>
<td>35</td>
<td>2</td>
<td>256</td>
</tr>
</tbody>
</table>

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Fig. 1. Glw-1 site location.
All of the gunflints from the site can be classified as gunspalls. The term originates with Hamilton (1960:73-79) and denotes gun-flints manufactured from spalls struck from flint nodules. Gunspalls are wedge-shaped in cross-section and feature retouch along the sides and heel of the top face which is slightly convex and usually contains a percussion bulb. The bottom face is flat or slightly concave (Fig. 2).

Gunspalls are easily differentiated from Nordic gunflints such as those reported from early seventeenth century Seneca sites (Witthoft 1966:22). Nordic gunflints are bifacially worked and tend to be generally cruder in appearance than gunspalls. French and English blade gunflints are also readily distinguished from gunspalls. Blade gunflints were made by sectioning blades struck from prepared lithic cores and are characterized by a bevel along the top face. French blade gunflints were not in widespread civilian use until after 1740 (Witthoft 1966:28) and English blade, or prismatic, gunflints were not common until the latter part of the eighteenth century (Witthoft 1966:36).

ATTRIBUTE ANALYSIS

The New Severn gunspalls comprise a markedly uniform sample. Except for one specimen, all of the New Severn sample conform well to Hamilton’s gunspall criteria (1960:73-79). The unique specimen is described separately following the analysis of the typical specimens.

The New Severn sample is internally homogeneous with respect to size attributes. The length and width variables feature similar means and standard deviations about the means (Table 2). Definitions of length and width follow Stone (1974) and concur with most other gunflint studies. Length is the distance between the heel and edge of a gunspall, while width is the distance between the sides (Fig. 2).

**TABLE 2**

<table>
<thead>
<tr>
<th>Attribute</th>
<th>N</th>
<th>X</th>
<th>R</th>
<th>S</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length (mm)</td>
<td>69</td>
<td>24.5</td>
<td>19-31</td>
<td>2.69</td>
</tr>
<tr>
<td>Width (mm)</td>
<td>69</td>
<td>24.6</td>
<td>14-31</td>
<td>2.82</td>
</tr>
<tr>
<td>Thickness (mm)</td>
<td>55</td>
<td>6.9</td>
<td>4-12</td>
<td>3.14</td>
</tr>
</tbody>
</table>

The relationship between the length and width values in the present sample is expressed in a ratio of approximately 1.00 unit of length to 1.00 unit of width. This ratio is determined by dividing the mean of the length value by the width variable mean.

Gunspall colour is only useful as a descriptive device. There is as yet insufficient information on the distribution of the European flint sources used to make gunspalls. Secondly, it has not been demonstrated that colour was a meaningful attribute to gunspall users.

With these qualifications in mind, there are three colours of flint represented in the New Severn sample. The vast majority of the gunspalls are made from an opaque mottled grey-
white flint (Table 3). However, as these specimens also feature extensive potlidding it appears that their colour is the result of thermal alteration (William Fox: personal communication).

This explanation supports other archaeological and historical evidence that the New Severn post was destroyed by fire (Christianson 1980:198-199). Similar grey-white gunspalls were observed by this author in the collection from the British frigate *Sapphire* sunk off Newfoundland in 1690. Part of this collection is stored at the National Historic Sites (Parks Canada) facilities in Ottawa.

**TABLE 3**

**NEW SEVERN GUNSPALL COLOUR CATEGORIES** Grey-white

<table>
<thead>
<tr>
<th></th>
<th>Black</th>
<th>Blond</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>N*</td>
<td>185</td>
<td>32</td>
<td>219</td>
</tr>
<tr>
<td>%</td>
<td>84.5</td>
<td>14.6</td>
<td>100.0</td>
</tr>
</tbody>
</table>

* complete and incomplete gunspalls

The second most frequently used lithic material ranges from charcoal-grey to black in colour and exhibits a translucent quality. Two gunspalls are made from a blond or caramel coloured flint.

Fig. 3. New Severn gunspalls. a-b: characteristic gunspalls; c: fireflint; d: reverse flaked gunspall.

**FIREFLINTS**

Fireflints are gunflints that are used in conjunction with metal strike-a-lites to produce sparks in order to start a fire. This activity produces a distinctive wear pattern that is easily
discerned. This wear is characterized by the removal of relatively large flakes from the gunspall edge giving it a crescent-shaped appearance (Fig. 3c) Eleven gunspalls from the site bear evidence of use as fireflints.

**A UNIQUE GUNSPALL**

A broken gunspall with unusual characteristics was noted in the collection (Fig. 3d). It features flaking along the edge and sides of the face opposite the percussion bulb (rather than on the same face as the bulb of percussion). This method of manufacture contrasts sharply with all other gunspalls from the site.

Although unique within the present sample, this gunspall type has been reported previously. Blanchette (1975:49) described similar gunspalls from the midseventeenth century occupation at the Chicoutimi site and also reports these items from several English-American colonial sites. In all instances reported by Blanchette these reverse flaked gunspalls occur in low frequencies suggesting that they represent errors in manufacture.

**ORIGIN OF THE NEW SEVERN GUNSPALLS**

The origins of gunspalls remains a contentious issue within historic archaeology. Until recently most researchers accepted Witthoft's (1966) technology-based classification that included the category Dutch gunflint for gunspalls. This expression reflected Witthoft's belief that gunspalls were principally manufactured in the Netherlands. While Witthoft's article remains a major reference source for gunflint studies, it appears that he was in error regarding the place of gunspall origin. White's well researched article (1975) effectively demonstrated that the Netherlands was not the principal locale for gunspall manufacture. Rather, White (1975: 65-68) suggested England was the probable center for the gunspall industry.

Documentary evidence from the early Hudson Bay fur trade suggests that gunspalls used and traded by the Hudson's Bay Company were actually purchased from French rather than English suppliers. A letter to Governor George Geyer at Port Nelson from the London Committee of the Hudson's Bay Company in 1691 clearly makes this point:

... & particularly to be sparing in your Flints (tho' it seems a very small thing) and in your brandy, they both being French commodities and hard to come by (Rich 1957:121).

Additional evidence that the Hudson's Bay Company purchased gunspalls from France is found in invoice lists of goods shipped to company posts. Although gunflints are usually only referred to in a general sense in these documents, seven specific references to French gunflints being shipped to Bayside posts can be found in the record between 1712-1719 (PAC MC 20 A. 24/2/fos. 28, 37, 43, 117, 119, and 122).

**SUMMARY AND CONCLUSION**

The gunspall sample from the New Severn post provides useful information on the gunspalls used and traded by the Hudson's Bay Company during its early years of operation. Analysis of these gunspalls has revealed size ranges for length, width, and thickness dimensions and identified eleven fireflints and a reverse flaked gunspall.

Documentary evidence from the early Hudson Bay fur trade suggests that gunspalls used in the late 17th century were manufactured in France. This finding supports White's (1975) argument against a predominant Dutch origin for gunspalls, and suggests that France was an active exporter of gunspalls, at least to the Hudson's Bay Company, during the late seventeenth and early eighteenth centuries.
ACKNOWLEDGEMENTS

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REFERENCES CITED

Blanchette, Jean-Francois  
1975 Gunflints from the Chicoutimi Indian Site (Quebec). *Historical Archaeology* 9:41-54.

Christianson, David  

Hamilton, T.M.  

Public Archives of Canada, Microfilm Collection (PAC MC)  

Rich, E.E.  

White, Stephen W.  

Witthoft, John  