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IRON TRADE KNIVES ON HISTORIC PETUN SITES

ABSTRACT

Historic Petun Sites in Southern Ontario have yielded a variety of iron knives of French origin. These appear to fall into five main types, each of which is described and discussed in this paper.

INTRODUCTION

The early and consistent popularity of the knife as a trade item has been the subject of comment by such writers as Gilbert Hagerty (1963; particularly 108-113) and George Quimby (1966, Chapter 5). A check of Ontario site reports would probably demonstrate that this item was as popular in Ontario as anywhere else. Certainly at the St. Louis Site and the Train Site in Huronia (Jury & Jury 1955: 52), and on the MacMurchy Site in the Petun country (Bell, n.d.), iron knives outnumbered the combined total of all other European metal tools.

The sample of trade knives which form the basis of this paper came from twelve sites. These are found along a line drawn diagonally from the Township of Mulmur, Dufferin County, into the Township of Collingwood, Grey County. All sites are intimately known to the writer, who has found nothing inconsistent in them with their identification as the sites of the Tobacco Nation, Tionontate or Petun; who resided in the area until their dispersal in 1650 A.D. (Boyle, 1889: 4-15).

Some parts of Ontario have a number of historically identified sites from the European trade period enabling one to assign fairly close dates to trade items. Fortunately this is the case in the Petun area, where the writer is able to draw on a variety of sources for dating the sites.

If one can assume that a mere trickle of French goods reached the Petuns prior to actual French contact, and that the great bulk of French material entered after, and perhaps in consequence of Champlain's visit in the winter of 1615/1616 A.D. (Champlain, 1929:

94-96), then the Historic Sites should be dividable, on the basis of trade goods type and frequency, into at least three major periods:-

- (1) Prior and to 1615 A.D.; "Early Contact".
- (2) 1615 A.D. to 1639 A.D.; "Contact".
- (3) 1639 A.D. to 1650 A.D.; "Mission".

The twelve sites from which the knife samples have been obtained are arranged according to the above chronology in Table 1. Unfortunately only a few knives are available from the Petun area, so that no definite conclusions as to varying preferences in style and availability of types through time, can yet be drawn.

TYPOLOGICAL CONSIDERATIONS

George Quimby was primarily concerned with the iron knife, along with other trade goods, as time period indicators. For this purpose he recognized two types, clasp-knives and butcher-knives (Quimby, 1966: 68-69). On the other hand, Gilbert Hagerty, after an intensive study of 161 knives from Oneida sites, first established ten types, and later, by extending his geographical and historical dimensions, another nine (Hagerty, 1963: 93). Since almost any number of "types" could be established depending on the degree of similarity or dissimilarity between knives, the writer has been guided by more practical considerations. For example, while the roundness or the pointedness of the blade tip may be important to the function of the knife, this trait is not considered in the writer's typology because the tip is usually missing, or if present, too corroded to allow determination of original shape, condition, and degree of subsequent reworking. It follows that if missing or corroded tips are more frequent features than blades in good condition, to set up a trait table requiring a good blade tip for classification would be to render the greater number of knife finds untypable.

KNIFE TYPES

For the purpose of this paper the writer has divided his specimen knives from historic Petun sites into the following five types:-

- (1) Clasp-knife
- (2) Collared Knife
- (3) Stemmed Knife with Pronounced Heel
- (4) Stemmed Knife with Tapered Heel
- (5) One-piece Knife

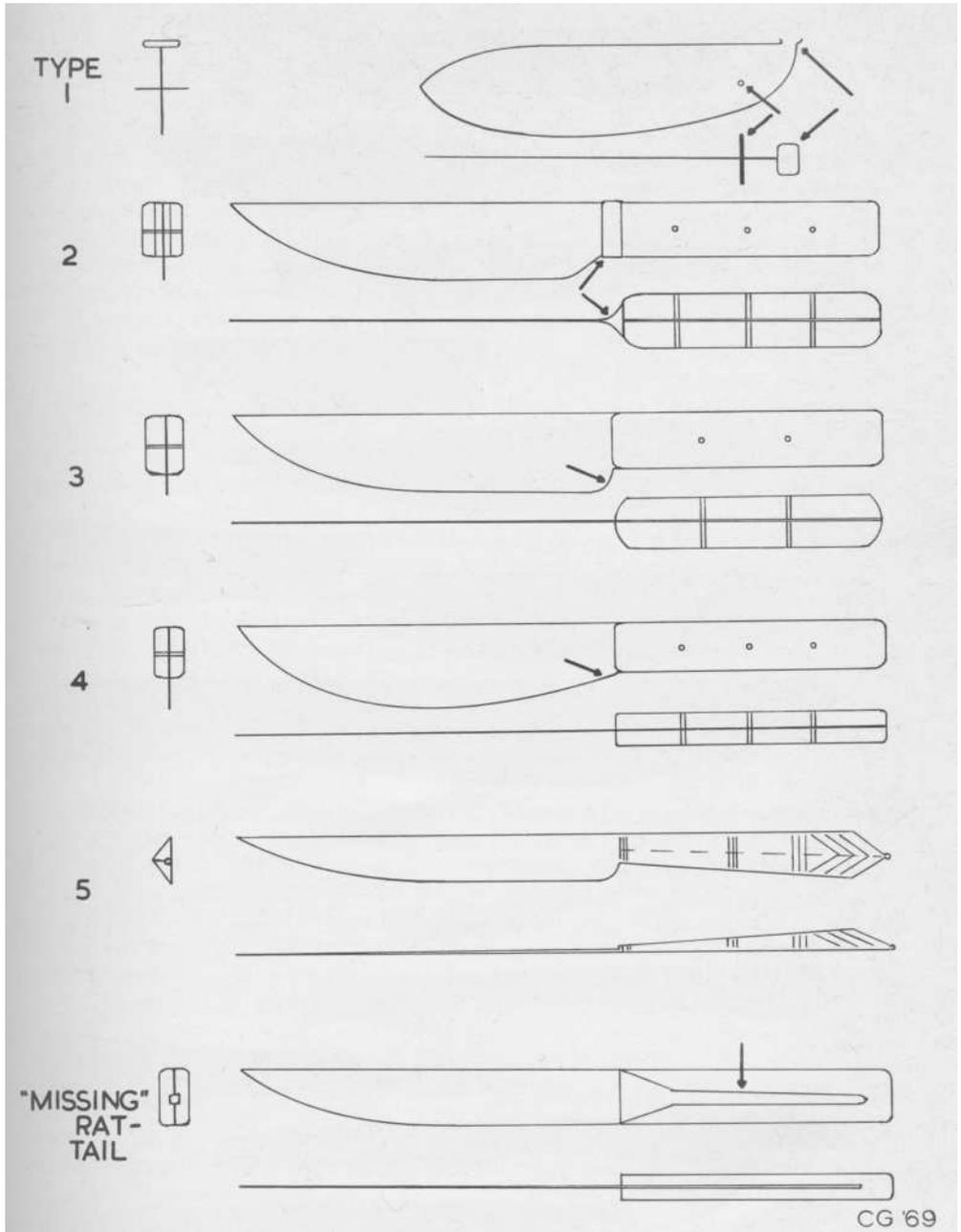
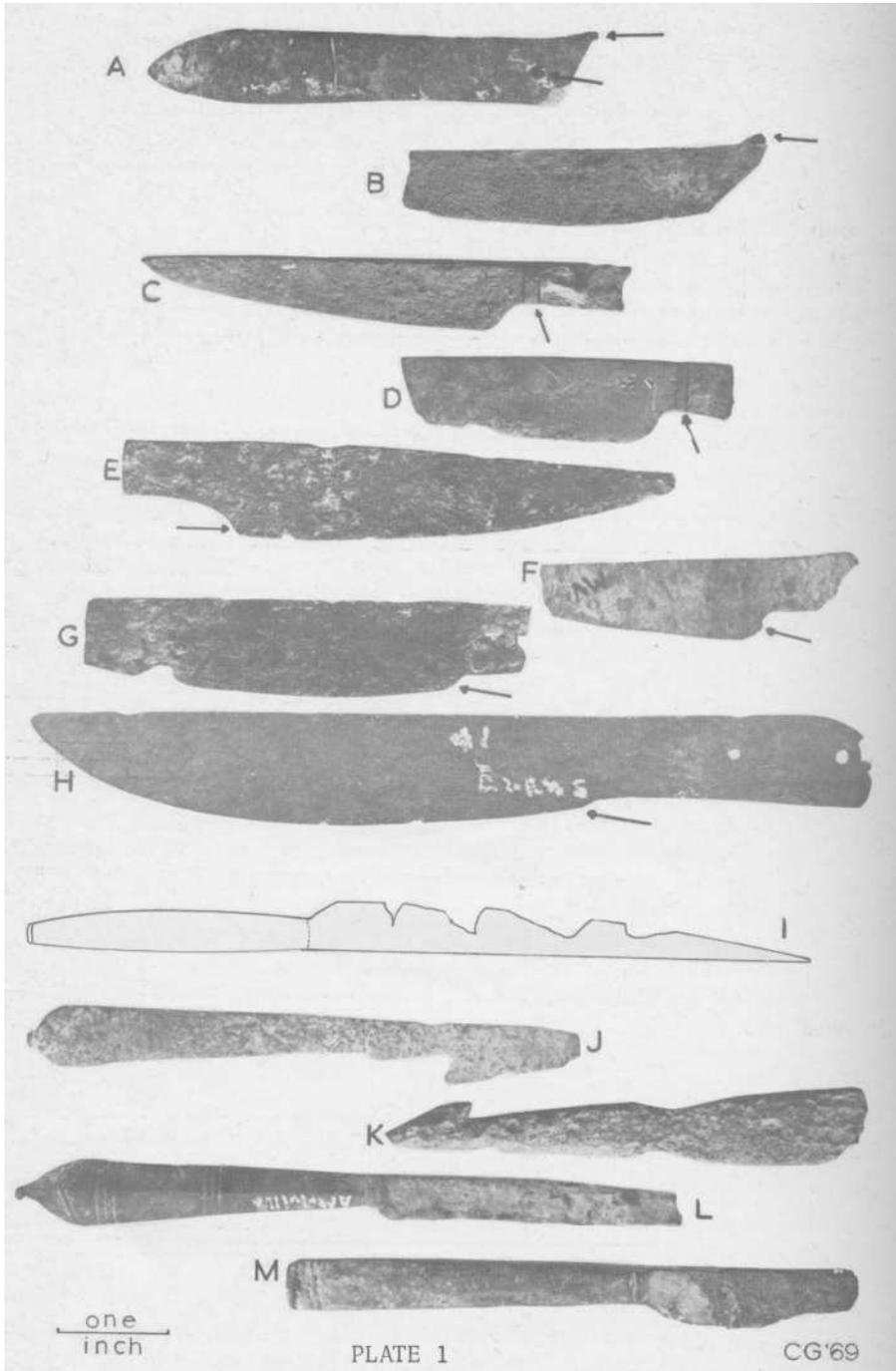


FIGURE 1

Six types of Iron Knife, Five of which are found on Historic Petun Sites. Arrows emphasize diagnostic features.



Photographs of Specimens described in the Text.
Arrows emphasize diagnostic features.

(1) *CLASP-KNIFE*

George Quimby wrote that, "Iron clasp-knife blades 4 or 5 inches long, with French names stamped on them, are representative of the Early and Middle Historic Periods ...". Despite considerable variation, each of these knives can be classed in one of two major types - those with sharply pointed blades or those with blades shaped somewhat like the bill of a hawk. All have a horizontal transverse flange at the top of the butt of the blade and a hole through the blade at the basal end. All of these blades originally had impressed upon them the names of their makers ... but in most cases pitting from rust has obliterated the manufacturer's name." (Quimby, 1966: 68).

The purpose of the "horizontal transverse flange" is to give rigidity to the open blade, and the "hole through the blade at the basal end" held the rivet on which the action hinged. In some cases the rivet is found in place.

Gilbert Hagerty's description (Hagerty, 1963: 98, Type "J"): "Clasp-knife blade; small horizontal flange at swivel end; hole at swivel end; blade usually leaf-shaped" is accompanied by an illustration complying with Quimby's term "sharply pointed". Clasp-knife blades resembling the "bill of a hawk" are absent from both the Oneida and Petun sites, the reason for their absence from Petun sites being perhaps explainable in terms of time, for an example illustrated by Hagerty is from a later Onondaga site, circa 1700 A.D. (Hagerty, 1963: 107, Figure 7 "Q").

Photograph "A" is of a typical blade of this sharp-pointed type, 4" long, complete with hinge-rivet and transverse flange. If there was a maker's mark, it is obliterated by rust. There is no indication of the type of handle or operating mechanism, but the blade itself is complete and a good example of the type. Excavated by the writer in 1962 from a midden of the "Mission" period in Collingwood Township, site designated BdHb-2. (Site designations are in accordance with Borden, 1952 and Garrad, 1967).

Photograph "B" is of a further example of this type, but broken at the tip and with the rivet missing. About half-way along the specimen three small uniform rust marks may indicate a maker's mark. It was found by the writer on the surface of a large site in Collingwood Township, believed to have been a Jesuit Mission, (site designated BdHb-1).

(2) *COLLARED KNIFE*

The diagnostic trait of this type is the "collar" between the blade and the handle, created by a thickening in the metal. The blade, collar and handle-stem are all one piece. The shape of the collar seems to become more pronounced and ornamental in later

years but during this period it is a simple thickening. The handle is completed by the riveting of wood, bone or horn pieces to the iron stem, indicated by a variable number of rivets or rivet-holes. The blade tip may be blunt (rounded) or sharp (pointed), and the Heel may be pronounced or tapered.

Site reports in describing knives are usually not detailed enough to distinguish the existence of the separate types, but a collared specimen was specifically described by Kenneth E. Kidd from Ste. Marie I as having "... a blade of the usual type and part of an iron handle which must have been encased in bone or wood originally. It was exceptional, however, in having a raised collar between the two. Remains of rivets were evident in the handle". (Kidd, 1949: 110, illustrated on Plate XLII "D").

Hagerty subdivides Oneida collared knives into two types depending on edge shape. (Hagerty, 1963: 98, Types "D" and "E").

Photograph "C" is a good example of the collared type. The handle is broken off at the second rivet, the first rivet remaining in place, and retaining some of the handle material, apparently horn, on both sides. The collar is oval in cross-section. The blade measures 3.5 inches from collar to tip, and in spite of the corrosion, both tip and blade edge have remained sharp. The sturdiness of this sample might indicate that it is the remains of a larger much-sharpened knife. The blade was excavated by the writer in 1964 from a midden on a large site of the "Contact" period in Nottawasaga Township, (site designated BbHa-7).

Photograph "D" is another example of this type, noteworthy for being sufficiently corrosion-free to reveal the mark "AG", the significance of which is unknown to this writer. No maker having these initials appears on Quimby's list (Quimby, 1966: 68). It is broken at both ends and the original blade configuration can not be estimated. It was a surface find by the writer from the same site as "B".

(3) STEMMED KNIFE WITH PRONOUNCED HEEL

The blade and handle stem of this type of knife are formed from a single piece of flat metal, the handle, as with the collared knife, being built up by rivetting two pieces to the stem. The blade is usually much wider than the handle, perhaps twice so, and the heel marking the reduction of the width between blade and handle is pronounced. The blade tip may be pointed or rounded judging from the specimens illustrated in the two Ste. Marie I reports (Kidd, 1949: Plate XLII "E", "F" and "J"; Jury & Jury, 1954: Plate XIII "a.1"), but all known Petun specimens are pointed complying with Hagerty's description: "Flat handle with no mid-section division. Wide blade; straight cutting edge; straight heel; blunt point; evenly tapered". (Hagerty, 1963: 98, Type "B").

Photograph "E" depicts this type. The blade tapers to a point, slightly damaged at the tip. The handle is broken, and the one remaining rivet hole sealed by corrosion. The cutting edge is dull and the broken stem noticeably burred from being hammered, indicating use after the handle had broken away. It was excavated by the writer from the same midden as "C^u".

Photograph "F" is a badly broken specimen but interesting because of its thin gauge, which perhaps assisted its deterioration but may indicate availability to the Indians of a selection of differing sizes and thicknesses of knife. It was found by the farm-owner on the surface of the same site as "C" and is now in possession of the writer.

(4) *STEMMED KNIFE WITH TAPERED HEEL*

Similar to type (3) the blade and handle stem are formed from a single flat piece of metal, with two side pieces being rivetted to the stem to form a handle. The diagnostic element of this type is that the heel formed by the reduction of the width from blade to handle is minor, or even non-existent, lost in the curvature of crescent-edged blades. That this feature is a true trait and not the result of corrosion or sharpening is shown for example by the popularity of this type, at St. Louis (Jury & Jury, 1955: Plate 5, Photo 4, 4th and 5th specimens). The single knife illustrated from the Ossossane Ossuary is of this type, complete with a wooden handle (Kidd, 1953: 371, Fig. 128 "C"). Hagerty, as with the Collared Knife, divides this type into two blade shape classes (Hagerty, 1963: 98, Types "A" and "C").

Photograph "G" is an example of this type retaining the characteristic minor heel even though too broken to determine blade tip shape or overall length. The flat handle stem is broken at the first rivet hole in spite of the sturdy gauge of the specimen. It was found by the farm-owner on the surface of the same site as "C" and is now in the possession of the writer.

Photograph "H" is a fine example of the type. It is almost complete, lacking only the added handle side-pieces. It's overall length is 7.5 inches. The blade tip is pointed and the edge curved. It would appear to be designed for butchering, inserting, cutting and slicing. This sample is in the Collingwood Museum collection and is from a site in Nottawasaga Township, most probably an "Early Contact" site designated BcHb-22.

(5) *ONE-PIECE KNIFE*

The diagnostic feature of this type is that the entire handle and blade are made from a single piece of metal, the thickness of the handle being, in all specimens known to this writer, offset to one side. Hagerty illustrates a perfect example of the type with a

"handle on slightly raised plane on one side" (Hagerty, 1963: 100). He describes its characteristics as, "Long narrow blade; offset handle; bellied cutting edge; point indeterminate" (Hagerty, 1963: 98, Type "F"). The Petun Indians apparently preferred this type of knife as potential harpoon material, for three of the five known Petun specimens have been so modified. In one case a single barb was cut into the handle; in the other two cases barbs were cut into the blades (See Plate 1). In view of these modifications, all five known Petun specimens will be mentioned and illustrated. The writer has located no specific description or illustration in Ontario site reports indicating the finding of this type elsewhere, but has notes of two found in the Neutral area (J. B. Morton and T. Kenyon, Pers. Comms., See Table 2).

Illustration "I" is sketched from a specimen in the Adams Collection, housed in the Royal Ontario Museum. At the time of writing, this specimen was not available for further study and photography, so the scale and detail may not be exact. It is a large specimen and the blade corroded to the extent that it is not certain how many barbs were cut, but it appears three or four. This specimen was found on the presumed site of a Jesuit Mission in the Township of Collingwood, (designated BcHb-27).

Photograph "J" is of a further example of the blade modified into a harpoon. The sample is much corroded and the tip broken so that the original number of barbs is not known. As a knife it bears little resemblance to the specimen "I", having a tapered handle rather than rounded, more resembling Hagerty's illustration. It shares with specimen "I" a small knob on the end of the handle, a feature also present on specimen "L". This specimen is in the Collingwood Museum collection and is from a site probably of the "Mission" period in Nottawasaga Township (site designated BcHb-19).

Photograph "K" is of a knife modified into a single-barb harpoon and in this example the handle, not the blade, was cut. Although very corroded, the offset handle is evident to the touch, the far side in the photograph being quite flat in line with the blade. It is not possible to judge if the blade was deliberately severed or merely broken off. It was found by the writer on the surface of a known Jesuit Mission in Nottawasaga Township, (site designated BcHb-10).

Photograph "L" is that of a better preserved specimen, although the blade tip is missing. Like "J" the handle tapers to the blade and like "J" and "I" there is a knob at the handle's end, in this case being pronounced and lop-sided such as might result from a casting process. In cross-section the handle is not half-moon as is the case with the others but more triangular, causing a ridge pronounced enough to be observable in the photograph. The decoration is confined to the visible raised side, the far side being flat and plain. This specimen is in the Collingwood Museum collection

and is from the same site as "C", "E", "F" and "G".

Photograph "M" is of a "One-Piece Knife" differing from the other examples. The handle taper is barely discernable, the handle end is flat rather than a knobbed triangle. In cross-section it resembles a half-moon and is decorated only on the rounded side. A large segment of the blade is absent. This specimen is in the Collingwood Museum collection and is from the same site as "L" and others.

MISSING KNIFE TYPES

Mention has already been made of clasp-knives "with blades shaped somewhat like the bill of a hawk"; the suggestion having been made that these belong to a slightly later period. Gilbert Hagerty writes that several of this type came from Onondaga graves, circa 1700. Dawson (1969: 48) describes one of this type from a level at the Longlac Site dated at 1740-1789. Other types are described as "little knives called jambettes" (Hagerty, 1963: 109, quoting Father Brebeuf in 1637) ; "small pocket knives" (Hagerty, 1963: 109, quoting Father Peron in 1639); "large clasp knives with horn handles" (Hagerty, 1963: 109, quoting Father Gravier in 1702); "long knives, cutteau knives, French cutteau knives, cutteau knives nos. 1, 2, 3; long knives sheathed; brass wrought pen knives; long fish knives ... clasp knives; scalping knives; small cutteau knives; buck handled knives; buckhorn clasp knives .., crocked knife; and small knives ..." (Hagerty, 1963: 109, quoting Sir William Johnson); "butcher knives, of two sizes; ... canoe knives; ... clasp knives" (Quimby, 1966: 65, quoting Bauxar 1959); "Flemish knives ..." (Quimby, 1966: 66, quoting Brown 1918). Such names, based on appearance, use or origin, do not assist our establishment of a typology based on observable physical traits.

One type seemingly absent from Petun sites without ready explanation is the "Rat-Tail" knife. This is a collared or uncollared blade, with or without heel terminating in a tang, prong. or "rat-tail" for insertion into a one-piece handle with a hollow centre. Hagerty has so many from his Oneida sites that they required subdivision into two types. On three of the ten sites in his study the "rat-tail" was the only type found and on another three sites represent the major type (Hagerty, 1963: 98, types "G" and "H", and: 94, Table 1). Since they are thought to have been available as early as the year 1600, and were very common in the Oneida territory by 1639, their absence (so far) from Petun sites is perhaps explainable as preference (Hagerty, pers. com.) or as a difference between Dutch and French trade knives. A search of publications yielded only one illustration of a "rat-tail" knife; from a mission site in Huronia destroyed in 1649 (Jury & Jury, 1955: 36, illustrated in Plate 5, Photo 4, Specimen 1). Another specimen forming part of the "French Trade Goods" display in the Royal Ontario Museum basement is also thought to be from the Midland

TABLE 1

PRESENCE OF IRON TRADE KNIVES ON HISTORIC PETUN SITES

Time Period	Site No. and Township	Type 1	Type 2	Type 3	Type 4	Type 5	Untypable Fragments. Author's Collection	Untypable. Reported by Others
e	BbHa-12 Mulmur							Collingwood Bulletin, 6, 1908.
e	BcHb-20 Nottawasaga						Present	
e	BcHb-22 Nottawasaga				H			
e	BcHb-26 Collingwood							Bell, n.d.
c	BbHa-4 Nottawasaga							Wintenberg, W. n.d.
c	BbHa-7 Nottawasaga		C	E, F	G	L, M		Webster, pers. com.
c	BbHa-10 Nottawasaga							
m	BcHb-10					K	Present	
m	BcHb-19 Nottawasaga					J		Wintenberg, W. n.d.
m	BcHb-27 Collingwood					I		
m	BdHb-1 Collingwood	B	D	Present			Present	
m	BdHb-2 Collingwood	A	Present				Present	

NOTE: Sites are designated in accordance with the Borden Scheme (Borden 1952; Garrad, 1967). Lower case letters indicate three time periods:-e - early contact, prior to 1615 A.D.; c - contact, 1615-1639 A.D.; m - mission, 1639-1950 A.D. U^Pper case letters refer to photographs on

TABLE 2

PRESENCE OF IRON TRADE KNIVES IN AREAS ADJACENT TO THE PETUN

SITES	1	2	3	4	5	rat- tail	AUTHORITY
Angoutenc	-	x	x	x	-	-	F. Ridley, pers. com.
Bristow	-	-	x	-	-	-	Sweetman, 1967.
H U R O N A R E A	Frank Bay	-	x	-	-	-	Ridley, 1954.
Orr Lake	-	x	-	-	-	-	Hagerty, 1963; quoting E. R. Channen
Ossossane Ossuary	x	-	-	x	-	-	Kidd, 1953.
St. Louis	-	-	-	x	-	x	Jury 4 Jury, 1955.
St. Marie I	x	-	x	-	-	-	Kidd, 1949, Jury & Jury, 1955.
Beverly Twp.	x	-	-	-	-	-	T. Kenyon, pers. com. quoting George Gee
Bradt	-	-	-	x	-	-	T. Kenyon, pers. com.
Dwyer Ossuary	x	x	x	x	x	x	Rutherford Smith col- lection (McMaster University)
Martin	-	x	-	-	-	-	T. Kenyon, pers. com.
Sealey	-	-	-	x	-	-	T. Kenyon, pers. com.
Walker	-	x	-	-	-	-	Ridley, 1961.
Uncertain	-	x	-	-	x	-	J. B. Morton collection
Uncertain	-	-	-	x	-	-	G. Parkin collection

NOTE: This table was compiled from the few published adequate descriptions and private notes, as a test of the writer's typology. It is not the result of extensive research.

The writer admits that to propose that a type is absent merely because no specimen is known to have been found is not conclusive. Further, the fragmentary and corroded nature of odd bits of metal often defy determination of the artifact, let alone allocation to a specific type. Also discouraging is the lack of adequate detail of knife finds in Site Reports, preventing real comparisons being drawn.

FURTHER STUDY

Access to the writer's knife specimens, both to those illustrated and others; to those in the Collingwood Museum, and to further details of the Sites on which they were found, is available to any serious student.

CONCLUSION

Historic Petun sites yield evidence confirming the popularity of the iron trade knife. Type availability and preference observed on Petun historic sites appear to correspond with sites of the same period in Huron and Neutral areas but not to the same degree on New York sites.

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