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A Seed in Skokloster Castle, Sweden: Searching for the Origins of Eight Susquehannock Artifacts

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A SEED IN SKOKLOSTER CASTLE, SWEDEN: SEARCHING FOR THE ORIGINS OF EIGHT SUSQUEHANNOCK ARTIFACTS

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ABSTRACT

A group of eight Native American artifacts held at Skokloster Castle in Sweden for more than 300 years had long been presumed to be Lenape in origin. A seed that clung to one of these items was studied in order to see if it might confirm the specific area of origin for this group of artifacts. While the seed proved to be so common as to be useless for a focused geographical identification, the years of research related to these objects has identified them as Susquehannock in origin. The route by which they reached Sweden still remains uncertain.

Introduction

A comprehensive study of eight pieces of Susquehannock material culture that had been collected in the early-seventeenth century was conducted during August of 1980 (see Becker 2012, also 1990a, 1990b). This small collection found its way to Skokloster Castle in Sweden, where they remain together to this day. Prior to the 1980s, this set of objects had been presumed, on no direct evidence, to have been collected by Johan Printz when he was Swedish Governor in the Delaware Valley colony and given to his friend Karl Gustav Wrangle as a gift (Becker 1979). The goal of the 1980 study, therefore, was to collect information on what had been presumed to be early Lenape material culture.

Material Culture Studies

Studies of material culture have advanced significantly since 1897, when Lucien Carr's description of the dress and ornaments of a considerable number of Native American cultures filled a mere 76 pages (Carr 1897). Our recent progress in distinguishing among the material products of various groups has improved our ability to trace cultural history. The identification of specific cultural boundaries (e.g., Becker 1983) has been followed by a concern for determining if it may be possible to recognize design or other patterns specific to each such culture from the artifacts they made. If this is possible, as we suspect, the cognitive components of each culture may be reflected in patterns of design and construction. Maslowski (1984) and others now recognize that perishable artifacts have much greater diagnostic value than lithic artifacts in determining prehistoric and/or ethnohistoric cultural boundaries.

Few, if any, early ethnographic pieces that can be conclusively attributed to any specific Native peoples of the Northeast survive. Of the few that are known, none are as well documented as the impressive piece from Virginia known as Powhatan's mantle, which has a long history and has been subjected to studies for nearly 100 years (Macgregor 1983; Tylor 1888). When examining artifacts believed to be Lenape in origin, the most problematic area of concern is the confusion resulting from the use of the term "Delaware" to indicate any member of the several cultural groups that occupied territories along the Delaware River Valley—or even to all the people of the entire Algonquian linguistic zone (i.e, Becker 1992 misidentified some artifacts of the Mi'kmaq or more northerly people because they were classified as "Delaware"). But the problem of placing all the people of the Delaware Valley into a single unit called "Delaware" (Goddard 1978) has primarily been resolved (Becker 2015a, 2015b). Recent studies demonstrate the integrity of each of these cultures at contact (Becker 1983). Any differences in their material culture have yet to be demonstrated.

Origin of the Skokloster Collection of Artifacts

The collection of eight Native American artifacts preserved in the armorial collections of Skokloster Museum in Sweden (Rangström et al. 1980:57–61; also Lindeström 1979) was believed to have been collected in the lower Delaware River Valley. These early-seventeenth century items were recognized as significant to Native American studies as early as 1906 when Amandus Johnson (1917:279) first reported them among the objects in this outstanding Swedish location. By tradition these eight artifacts were believed to have come from New Sweden on the Delaware (1638–1655). Since Johan Printz, governor of New Sweden from 1643 until 1653, was a friend of Carl Gustav Wrangel, who inherited the Skokloster estate in 1643, the belief that these items were a gift brought home from the New World appears logical. Certainly Printz' return during the height of Wrangel's collecting activity and during the building of his big castle, provided a good possibility that Printz had been part of the route for these items reaching Sweden. Yet every effort to confirm this supposition failed.

The first written record noting these eight ethnographic pieces appears in the Skokloster Castle inventory of 1710 in which they are simply described as Indian artifacts. No place or date of origin appears, nor is there a reference to their source. This would appear unusual if the pieces were a gift from a friend or known to derive from that most distant part of the seventeenth-century Swedish empire, situated along the Delaware River. While we might wish to accept the *idea* that Printz, a military man and provincial governor, had returned with these curiosities as examples of the kind of work done by the local natives, we have no supporting evidence. Printz himself had noted the skill of local Natives in crafting items of stone, wood, and metals on at least two occasions. One of these was in a letter to his Queen in 1644 that accompanied a series of Native-made artifacts sent to her as a gift. The gifted items included a wampum belt and other items accompanied by a descriptive list (e.g., Johnson 1930:166–167). Printz's role as a collector of Native artifacts is also documented from the archaeological evidence found during the excavation of his residence on the Delaware River. A Native stone tool (hatchet head) was recovered from the burned

materials resulting from a devastating fire in 1644 (Becker 1999:17–18). However, no document or written reference exists to confirm that Printz secured ethnographic examples to take back to Sweden, nor that he ever transmitted any examples to Wrangel. Perhaps a study of the later years of Printz' life might provide evidence that some portion of his collections or possessions were later acquired by Wrangel, but to this date no evidence has been found.

The earliest of the Skokloster Castle inventories dates from 1652, but no mention of these eight items appears therein (an English edition of this list is in process)—nor do they appear on the 1672 inventory, which was not a complete account but might be expected to have listed these items. Bengt Kylsberg (personal communication) suggests that they may have arrived at Skokloster by 1676 during a period when many other holdings joined the original collections. Perhaps they came from Johan Printz's estate, the records of which might provide useful clues to the origins of these and possibly other New World artifacts.

Two other possible sources for these eight ethnographic pieces have been brought forth since 1980. Wrangel was a great collector, as attested by the present Skokloster Castle holdings—all of which he amassed and documented in extreme detail. A great deal of the material purchased by Wrangel came from the Netherlands, as is extensively documented in the Skokloster archives. Quite possibly, these eight ethnographic pieces were purchased in a group in the Netherlands, having come from the Dutch Colonial area of North America. The Dutch, in fact, had a trading station on the Delaware River by the 1620's and had been trading in that area for many years before. Most of the ships used by the Swedish company traveling to New Sweden employed Dutch officers and crew familiar with the routes and area through previous voyages to the region. Any of these people could have brought back material from the lower Delaware River. Furthermore, and more important to this discussion, the Dutch colony at New Amsterdam had extensive interactions with a series of Native American cultures, any one of which could have produced these artifacts.

We know so little about perishable goods from North America from the seventeenth century that we cannot easily assign origins to any of these pieces. Ball-headed clubs are perhaps the best known category of artifact from this region (see Feest 1983), but the two at Skokloster Castle could have been made and used by the Lenape as well as by several other nations in contact with the Dutch. These include the Esopus (Becker 1983, 2015), living to the west of New Amsterdam in what is now northern New Jersey, as well as many other groups whose specific identities are only now becoming understood. Various groups along the waterways near New Amsterdam and up the Hudson River also interacted with the Dutch. Many, like the Esopus, were involved in a series of wars with the colonists, and a cluster of artifacts from any of these groups could have been taken during a raid on their settlements. Dutch trade with the Five Nations (Iroquois) became the primary source of financial reward in New York, and those people also produced and used clubs, perhaps like those at Skokloster.

Any of these Native American groups could have made this collection of artifacts at Skokloster. The items could have been taken to the Netherlands by Dutch traders or travelers, where they were then purchased by Karl Gustav Wrangel. Arguing against this scenario, though, is the extensive documentation of all purchases found in the Skokloster archives. Arne Losman (personal communication) indicates that he has reviewed up to 50,000 letters and documents concerning the life of Wrangel and in particular the acquisition of the vast collections now at Skokloster. No mention of these eight Native items has been identified.

A third likely source of these interesting pieces leads us to an equally problematic sequence of events. Considerable quantities of goods came to Skokloster as war booty from various parts of the Swedish empire, which had reached its zenith in the early 1600s. For example, many of the fine silver pieces in the church at Skokloster Castle came as booty from Poland, and the Codex Gigas came to Sweden as booty from the area of the present Czech Republic. Of concern to the Lenape problem is the fact that looting in Denmark provided a great deal of the material at Skokloster, some during the Danish wars in the 1640s. Possibly other items were acquired during the occupation of Zealand, Denmark (1658–1660). For reasons as yet unknown Danish ethnographic collections include an impressive number of pieces from the early contact period in the New World. The ball-headed club in the Copenhagen National Museum (Catalogue No. EGb 153), however, is one of at least two early European copies of the Skokloster club (6901); the other copy is one of the two ball-headed clubs in the Etnografiska Museet in Stockholm (Becker 1990b). If these pieces at Skokloster had come from Denmark the relationships between these pieces and clues to their origins might be sought in Danish archives.

How these many ball-headed clubs came to be in these various European locations is critical to determining their exact origins (cf. Becker 1980). Information from the clubs would bear on the actual source for the eight Native pieces at Skokloster, but despite what we know about such items, specific origins cannot be determined. Other New World artifacts without provenance appear in the Skokloster collections including a kayak and paddle, an anorak in the textiles department, and a hammock. None are related to the eight items of the 1980 study. The possibility that these eight objects in question derive from the Delaware River and were brought back by Johan Printz is quite good, but far from conclusive.

CULTURAL IDENTIFICATION

Ideally we would be able to identify the place of manufacture and time of origin for these Native American pieces at Skokloster, and to note the people (cultural group) who made them. Even if we could identify Johan Printz as the individual who gave these pieces to Carl Gustav Wrangel, we still would not be able to specify the original makers due to the complexity of the political history of New Sweden during the seventeenth century.

The earliest known European accounts from along the Delaware River (1620's) indicate that the Susquehannock had intruded into this region and disrupted and displaced the Native people, the Lenape. Amandus Johnson, who first reported the value of this collection at Skokloster, made two extremely important observations regarding the economic and political realities of life in the Swedish colony. First, Johnson's (1917:279) study of the Colonial documents clearly indicated that "the River Indians were poor and had nothing but maize to sell." Johnson realized that the Lenape of the period around 1650 were poor in peltry, but that their sales of maize, as well as venison, beans, fish, and even hops, were important to the economy of the impoverished Swedish outpost (Becker 2014b, also 1995, 1999). Second, Johnson (1917:278) recognized that the Susquehannock and other Native American people of 1655 were as threatened by the English as were the Swedes and the Dutch. This led the leaders of the White Minquas (Susquehannock) "and their united nations, The Tehaque, the Skonedidehoga, the Serasquacke, the true Minguas and the Lower Quarter of the Minguas..." (all resident in the area around the central Susquehanna River drainage) to offer a large tract of land to the Swedes and inducements to become allies. The Susquehannock hoped to use the Swedes as a buffer in their wars with the Five Nations, but the Swedish colony was not to last the year, and the Dutch and Susquehannock power were not to survive another two decades.

Artifacts collected along the Delaware River before 1710 could have been produced by any of the three Delawarean groups, although the "Munsee" were less likely to be represented along the lower reaches of this waterway (Becker 2015). However, the Susquehannock (Minquas) were the militarily dominant people on the west side of the river during the first half of the seventeenth century, and also the principal suppliers of peltry to Europeans (Kent 1984). Although Lenape bands native to the Lower Delaware remained in that area during this period, Susquehannock interactions with the Swedish traders may have been at a level greater than those of the local Lenape. This early interaction led me to consider the probability that the Skokloster Castle artifacts were made and used by the Susquehannock of that period.

Ethnographic Evidence

Although the English had been trading for pelts in Scandinavia since the 1550s, the potential supply in North America was an attraction, especially since the French were profiting from this trade. Susquehannock trade from Native areas up the Potomac to the Spanish down the Potomac may have been strong even prior to 1540 (Becker 1987). Since the mid-sixteenth century the Susquehannock were trading pelts to the French at locations along the St. Lawrence. The Susquehannock may also have been trading on the Delaware River by that time, passing goods to Dutch explorers coasting along the shores of the Northeast. Dutch random trade with the Native peoples in that period led to the establishment of New Amsterdam, as well as trading stations along the Connecticut and Delaware Rivers. These Dutch explorer-traders could have secured the pieces now at Skokloster. Linné (1958, also 1955) notes that some of the artifacts in Wrangel's collection may have come from Dutch contacts (Manville and Sturtevant 1966:220)

The Susquehannock of the sixteenth and seventeenth centuries are well known from archaeological research (Kent 1984), but only limited aspects of their material culture are available for comparison. Care also should be given to Captain John Smith's account of his voyage of exploration up the Susquehanna River during the summer of 1608, and to the figure of a Susquehannock elder depicted on the 1612 John Smith map of Virginia (Smith 1910:Frontis; Cumming et al. 1972:Figures 316, 311). Early in the trip, Smith sent a message up river to the Susquehannock people, well known as the most powerful and richest group involved in the pelt trade. By 1608, Smith (1910:122) had reached the Tockwhoghs, noting that they had gotten their trade goods, such as iron tools and beads, from the Susquehannock who lived to their north.

Smith and his party continued up the river after this meeting, but little additional data of use to our study is provided. The targets (shields) used by the Massawomek are briefly described (Smith 1910:425), but that is the only information about material culture of direct interest in this study. Of indirect interest, but perhaps more significant, is the note that each group gathered up the arrows shot at them for reuse (Smith 1910:127). This shifting of arrows between groups suggests that the identification of a "culture of origin" for this ethnographic item (at least) would be unlikely (Becker 1981). The account of this short voyage provides some of the most significant evidence about local populations at that time and some useful clues to the functions of ethnographic pieces.

Smith only traveled as far as the area of the Nansemunds and Chisapeacks (Smith 1910: 432). Three or four days after their arrival, a contingent of 60 Susquehannock came down the river bearing considerable gifts for Smith and his party. These presents included 3-foot (0.9-m) long tobacco pipes, probably the kind later called "calumet" or peace pipe, and tobacco bags (Smith 1910:29, 423). The Susquehannock covered Captain Smith "with a great painted Beares skin" in addition to presenting him with many other lavish gifts (Smith 1910:423). This "painted Beares skin" may have been a dyed fur, or a hide from which the hair had been removed and the bare surface painted with designs and/or symbols.

Smith certainly observed at that time that these people were notably taller than any of the other tribal groups he had contacted. The caption to the large inset of his 1612 map, depicting a Susquehannock in full costume, reads: "The Sasques=ahanougs are a Gyant like peop=ple & thus a=tyred" (Becker 2012:67). On September 7, 1608, Smith returned to the English colony. Smith's observation regarding the impressive stature of the Susquehannock has been the subject of some discussion over past century, but has been confirmed by studies of Susquehannock skeletal remains (Becker 1987, 1991) as well as by independent observations of these people made early in the eighteenth century. Study of the eight artifacts at Skokloster Castle suggests that the very items seen by Smith in 1608 came as a group from this voyage.

Perhaps the most important single piece of evidence concerning material culture in this area derives from the illustrative figure of a Susquehannock "warrior" that appears on the John Smith map of this region (Figure 1). This person (illustrated in Smith 1910:

frontispiece) holds a long bow and vaguely depicted costume including a fringed skirt. Of considerable importance to the study of the Skokloster material is the decorative pendant and neckpiece worn by the "Gyant like" Susquehannock depicted in the cartoon on the John Smith map. He wears a close-fitting "shirt" behind which decorative paws (?) depend. His loins are girded by a fringed and bead trimmed skirt, and a canid-like animal hangs behind his waist. This is almost certainly the same type of pouch or quiver that is now in the Skokloster collections (Becker 1990a).

Equally important in this drawing is a wolf's head pendant suspended from a furwrapped, twisted cord around his neck. This kind of necklace is also represented by one of the eight items now at Skokloster (Inventory No. 6909; see Becker 2012:70, figure 2). The animal's head hangs at the level of the base of the Native's sternum, and the depiction of the "cord" as twisted reflects a spiral hair cord such as that found on four of the eight Skokloster pieces (Figure 2).

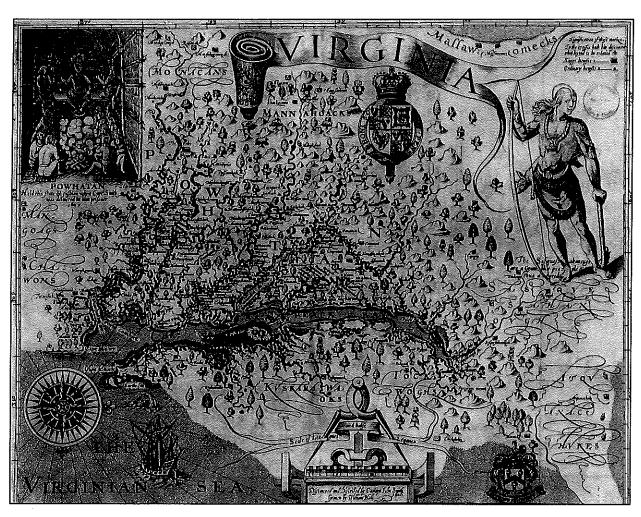


Figure 1: Smith Map of 1612. Note the inset in the upper right corner showing a Susquehannock "warrior with all of these artifacts.

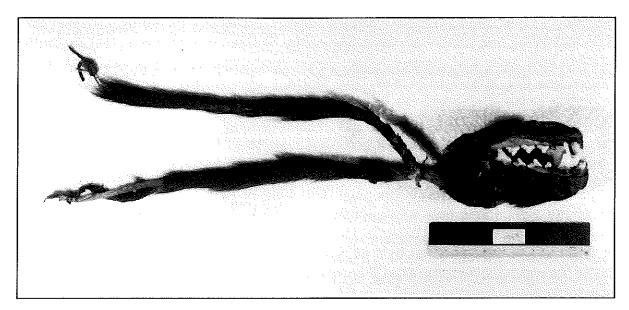


Figure 2: Pendant Wolf Head (Item 6909), as Worn Around the Neck on Map Insert.

The cordage found in the two burden straps at Skokloster, as well as in the "hair-strings" and other parts of the four "furred" objects, all have been made with a z-twist (Figure 3). Maslowski (1984:51), in a study of cordage in archaeological contexts, suggests that specific spin and twist patterns can be demonstrated to have "occurred and persisted in definable cultural areas." Most of Maslowski's evidence derives from studies of pottery that has been decorated by texturing the surface with a cord-wrapped paddle or similar technique. This puts the imprint of the perishable cord into the more durable ceramic, and the reverse impression can be studied. James Herbstritt (personal communication) believes that s-twist cordage is common to the glaciated plateau area of Pennsylvania, while z-twist cordage is found among the Monongahela people of western Pennsylvania and in Shenks Ferry and Susquehannock pottery. While the z-twist cordage of the Skokloster pieces also might have been made by the Lenape, as yet no cordage data for these people has been compiled. The Susquehannock, therefore, became the primary candidate for the origin of these objects.

The Inventory Records

The earliest inventories of the Wrangel armory date from 1653 and 1655, both undertaken by Anna Marguereta Wrangel. During those years, when Carl Gustaf Wrangel was beginning to gather his impressive collection, the objects were kept in the old convent buildings. The present castle was still being developed. These armory items were not moved to the castle until after 1670, the year of completion of the three rooms in which they are now found. No evidence of these American pieces can be found on Wrangel's early inventories. Quite probably the American artifacts were not part of the collection as early as 1655, but came later. A collection of weapons and curiosities such as this would have made an ideal gift. Many of the other weapons in the collection were presented to Wrangel as gifts by guests at his elaborate dinner

parties. His enjoyment of such items, and the development of the collection, fostered this kind of giving. Wrangel and his guests certainly enjoyed the collections, which include numbers of Polish (and Turkish?) bows and elaborate quivers. The arrow points in the ceiling of the round room (Room 4H) at the castle reflect the testing of these weapons in the places where they were kept. Most peculiar is the absence of any bows, quivers or arrows that could be from North America.

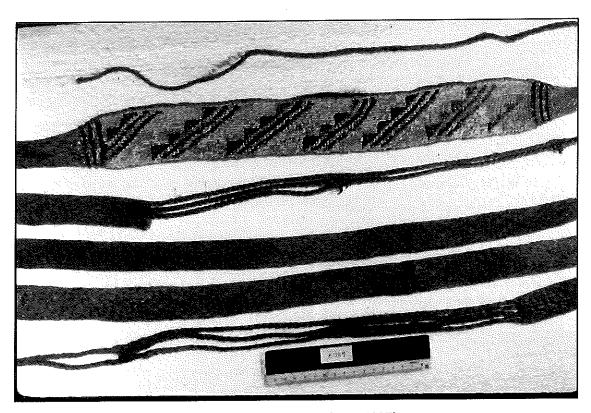


Figure 3: Burden Strap (Item 6907).

A Well-Traveled Seed

The seed in question was found embedded in an artifact identified as a "headdress" in the Skokloster Museum collections (Catalogue No. 6911; see Becker 2012: 71, figure 4). This is a leather construction that was covered with "fake fur"—a long string of leather into which was woven animal (deer?) hair that had been stained or dyed a bright red (Figure 4 and Figure 5). The seed itself was embedded in a fold of the leather material on which the "fur" was attached to form a uniform covering.

The Skokloster seed is assumed to have become attached to the "headdress" at some point during the useful life of this piece, and before it came into the hands of the European who carried it to Europe, possibly directly to Sweden. We assume that the seed already was attached when this set of artifacts was sent on loan to the National Museum (Smithsonian) in Washington, DC where they were photographed, but not studied. After an interesting delay, these artifacts (and the seed) were returned to Skokloster Castle where I examined them during August of 1980.

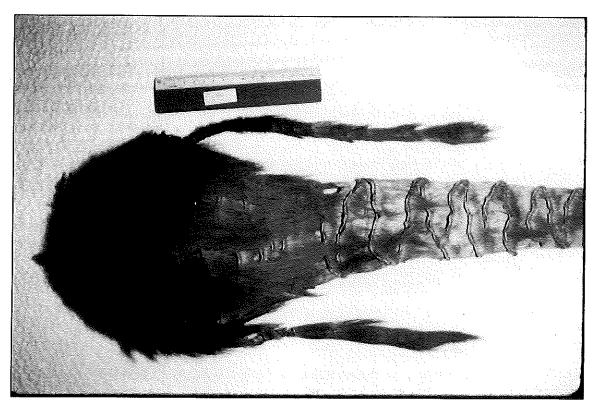


Figure 4: Headdress (Item 6911), One of the Items Found Amongst the Collection. The seed in question was embedded in the "hair." This is a form of fake fur covering the headdress.

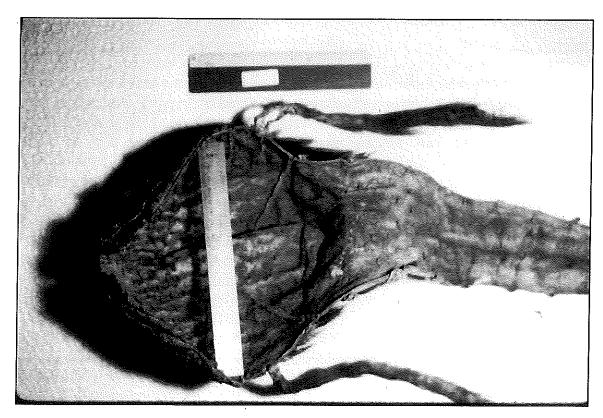


Figure 5: Inner Surface of Headdress (Item 6911).

With the kind permission of Arne Losman, the seed was extracted for study and again crossed the Atlantic. In 1987 the seed was carried to England where I was in residence at Cambridge University. Dr. Jane M. Renfrew (Lucy Cavendish College) had kindly offered to attempt an identification. The seed was delivered on May 19, 1987, but the usual pressures of research precluded an examination during the remaining period of my stay. The seed again crossed the Atlantic, where it was examined by Dee Ann Wymer. She identified it as a Ranunculus (Family *Ranunculaceae*) using Martin and Barkley (1961:158, figures 109–111; 97, plates 647–652), although noted that it seems similar to *Lepidium vig* (Family *Crucifera*;, see Eaton and Wright 1840:27).

The un-germinated seed was not carbonized or altered in any way. The length is 0.6 inches (4 mm) long and 0.11 inches (2.8 mm) wide, with a papery wall that appears to have a slight pattern on the surface (or coarsely wrinkling). The perennial herb Ranunculus bulbosa (St. Anthony's turnip, bulbous buttercup, crowfoot), a common meadow and wetlands plant widely distributed throughout the eastern United States. The bright yellow flowers are vivid in May when early flowering reflects the hearty root system. The plant commonly grows to a height of 4–12 inches (10–30 cm). The toxic and acrid chemicals throughout the plant lead to its use as a blistering agent, and modern homeopathic uses are extensive. While Ranunculus may be native to North America, it is widespread in England and could be an import despite a lack of burrs or fibers suited to attachment to animals or people. Ranunculus does have a significant curved "hook" that allows for attachment, as is demonstrated by this specimen (Figure 6) (Martin and Barkley 1961:158). The rapid spread of exotics via seeds attached to Europeans is a continent wide phenomenon (cf. Kaiser 2002:1635).

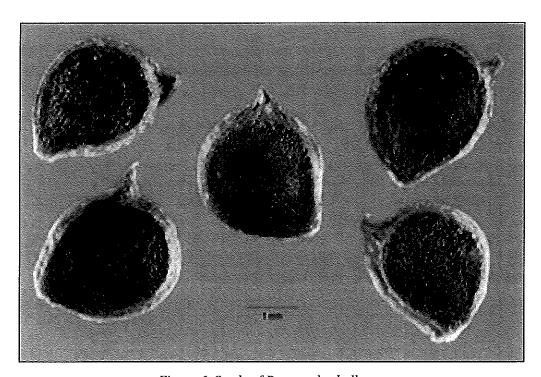


Figure 6: Seeds of Ranunculus bulbosa.

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REFERENCES

Arber, Edward (see Smith 1910)

Becker, Marshall Joseph

- 1979 Ethnohistory and archaeology in search of the Printzhof; the seventeenth century residence of Swedish Colonial Governor Johan Printz. *Ethnohistory* 2 (1):15-44.
- 1980 A Ball Headed Club from the Eastern Woodlands in the Collections of the Horniman Museum, London, England. *Pennsylvania Archaeologist* 50(1 & 2):1–8.
- 1981 Arrows: How they work and modern replication of ethnographic examples as a guide to possible identification of tribal origins. *Anthro-Tech: A Journal of Speculative Anthropology* 5(4):6–10.
- 1983 The Boundary Between the Lenape and the Munsee: The Forks of Delaware as a Buffer Zone. *Man in the Northeast* 26(Fall):1–20.
- 1987 An Analysis of the Human Skeletal Remains from 46-HM-73 [Pancake Island]: A Susquehannock Population of the Mid-Sixteenth Century. *West Virginia Archeologist* 39(2):37–53.
- 1990a A Wolf's Head Pouch: Lenape Material Culture in the Collections of the Skokloster Museum, Sweden. *Archeomaterials* 4(1):77–95.
- 1990b Two seventeenth Century Clubs in the Collections of the Skokloster Museum, Sweden. European Review of Native American Studies 4(1):19–28.
- 1991 The Stature of a Susquehannock Population of the Mid-sixteenth Century Based on Skeletal Remains from 46HM73. *Pennsylvania Archaeologist* 61(2):73–88.

- 1992 Lenape Clothing of the Early 19th Century as Indicated by Artifacts in the Ethnographic Collections of the Historical Museum of the University of Lund, Sweden. Meddelanden från Lunds universitets historiska museum. *Papers of the Archaeological Institute* (1991/1992) NS 9:131–154.
- 1995 Lenape Maize Sales to the Swedish Colonists: Cultural Stability during the Early Colonial Period. *New Sweden in America*, edited by Carol E. Hoffecker, Richard Waldron, Lorraine E. Williams, and Barbara E. Benson, pp. 121–136. University of Delaware Press, Newark.
- 1999 Cash Cropping by Lenape Foragers: Preliminary Notes on Native Maize Sales to Swedish Colonists and Cultural Stability During the Early Colonial Period. Bulletin of the Archaeological Society of New Jersey 54:45–68.
- 2006 The Prinzhof (36DE3), A Swedish Colonial Site that was the First European Center of Government in Present Pennsylvania. *Bulletin of the Archaeological Society of Delaware* 43 New series (Fall, issued 2011):1–34.
- 2011 Important Illustrations of Susquehannock Material Culture: A Review of "A Glimpse of the World Non-European in Skokloster Castle" edited by Elisabeth Westin Berg. Introduction and Text by Bengt Kylsberg. Norrköping, Pressgrannar AB, Sweden. Skoklosterstudier Number 37. *The SRAC Journal* 7(1):1–3.
- 2012 Susquehannock Material Culture Revisited: Eight Pennsylvania Ethnographic Artifacts in the Skokloster Castle Collection in Sweden and a Possible Connection to Capt. John Smith. *Pennsylvania Archaeologist* 82(1):66–73.
- 2014a Ethnohistory of the Lower Delaware Valley: Addressing Myths in the Archaeological Interpretations of the Late Woodland and Contact Periods. *Journal of Middle Atlantic Archaeology* 30:41–54.
- 2014b Lenape ("Delaware") in the Early Colonial Economy: Cultural Interactions and the Slow Processes of Culture Change Before 1740. *Northeast Anthropology* 81–82:109–129.
- 2015 The Wiechquaeskeck (Southwestern Connecticut, Westchester and Manhattan Island) and the origins of the "Raritan" and "Munsee" Indians of New Jersey: The Raritan Valley Buffer Zone as a Refuge Area for some Native Americans During the seventeenth Century. Bulletin of the Archaeological Society of Connecticut. In review.

Carr, Lucien

1897 Dress and Ornaments of certain American Indians. *Proceedings of the American Antiquarian Society, Semi-annual Meeting* (April). Charles Hamilton Press, Worchester, Massachusetts.

Cumming, William P., R. A. Kelton and David B. Quinn

1972 The Discovery of North America. American Heritage Press, New York.

Eaton, Amos, and John Wright

1840 North American Botany Comprising the Native and Common Cultivated Plants North of Mexico. Eighth edition. Elias Gates, Troy, New York.

Feest, Christian

1983 "Skin Shirt". *Tradescant's Rarities*, edited by Arthur Macgregor, pp. 121–125, Plates. Clarendon Press, Oxford.

Goddard, Ives

1978 Delaware. In, *Handbook of North American Indians, Volume 15: Northeast*, edited by Bruce G. Trigger, pp. 213–239. Smithsonian Institution Press, Washington, DC.

Johnson, Amandus

- 1917 Indians and Their Culture as Indicated in Swedish and Dutch Records 1616–1664. *Proceedings of the Nineteenth International Congress of Americanists*. Washington, DC, December 1915, pp. 277–282.
- 1930 The Instruction for Johan Printz Governor of New Sweden. The Swedish Colonial Society, Philadelphia.

Kaiser, Jocelyn

2002 An Ecological Oasis in the Desert. Science 297(6 Sept):1635, 1637.

Kent, Barry C.

1984 Susquehanna's Indians. Pennsylvania Historical and Museum Commission, *Anthropological Series* 6. Harrisburg.

Lindström, Peter

1925 *Geographia Americae*. Translated and edited by Amandus Johnson. Swedish Colonial Society, Philadelphia.

Linné, Sigvald

- 1955 Drei alte Waffen aus Nordamerica in Staatlichen Etnographischen Museum in Stockholm. Baessler-Archiv. *Neue Folge*, Band III (Band XXVIII):85–88.
- 1958 Three North American Indian weapons in the Ethnographical Museum of Sweden. *The Connoisseur* 105:34–36.

Macgregor, Arthur (editor)

1983 Tradescant's Rarities. Clarendon Press, Oxford.

Manville, Richard H., and William C. Sturtevant

1966 Early Specimens of the Eastern Wolf, Canis lupus lycaon. *Chesapeake Science* 7(4):218–220.

Martin, Alexander C., and William D. Barkley

1961 *Seed Identification Manual.* University of California Press, Berkeley and Los Angeles.

Maslowski, Robert F.

1984 The Significance of Cordage Attributes in the Analysis of Woodland Pottery. *Pennsylvania Archaeologist* 54(1–2):51–60.

Rangström, Lena, Karin Skeri and Elisabeth Westin Berg

1980 Skokloster Castle and Its Collections. Skokloster Castle, Bålsta, Sweden.

Smith, John

- 1612 "Virginia" [map]. Reissued in 1612 as "A Map of Virginia: With a Description of the Countrey, the Commodities, People, Government and Religion. Oxford.
- 1910 Travels and Works of Captain John Smith: President of Virginia and Admiral of New England, 1580–1631. Two volumes. Edited by Edward Arber. John Grant, Edenborough.

Tyler, Edward B.

1888 Notes on Powhatan's Mantle. *Internationales Archiv für Ethnographie* I:215–217.

Westin Berg, Elisabeth (editor)

2006 *A Glimpse of the World Non-European in Skokloster Castle.* Introduction and Text by Bengt Kylsberg. Pressgrannar AB, Norrköping, Sweden. Skoklosterstudier Number 37.