NANTUCKET ALGONQUIAN STUDIES #9

INDIAN HORSE COMMONS AT NANTUCKET ISLAND, 1660-1760

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1990

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January 20, 1990

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This paper was presented at the 1986 meeting of the American Society for Ethnohistory at Charleston, SC. It has been slightly revised since that time.

HORSE COMMONS AT NANTUCKET ISLAND, 1660-1760.

Twenty English proprietors in 1661 purchased a small amount of land at Nantucket together with the pasture and haying rights to the entire island. This action left the Indian inhabitants no rights to keep grazing animals on their own lands. The outcome of the resulting contest between the Sachems and the English, skillfully negotiated by both sides, was that proprietary rights were to be required to own grazing animals on the island, and the Sachems obtained from the proprietors rights to keep approximately 87 horses. Registered deeds record the transfers of these rights, called Horse Commons. Horse Common deeds not only helped avoid a Tragedy of the Commons (McCay and Acheson 1987), but provide details about the Nantucket Indian culture, and reveal the complexity of the interface between a Native American and a European society in the late seventeenth and early eighteenth century.

INTRODUCTION.

Studies of specific social changes in historical contexts have shown the richness of the ethnohistorical data available in the northeast (Axtell 1981; Bragdon 1981; Brenner 1980, 1984; Jennings 1975; Salwen 1978; Salisbury 1982; Simmons 1986; Thomas 1979,1985; Trigger 1980). Using historical sources for the Massachusetts Indians, Brenner (1984), Simmons (1986) and Thomas (1985) have demonstrated the persistence of ancient ways and the adoption of new ones in coping with change. At Nantucket Island, off the coast of Massachusetts, a study of deeds and other documents has revealed that a major conflict between the English and the Indians on the island in the seventeenth and eighteenth centuries concerned grass (Little 1976). In this paper, based primarily on deeds for herbage or grass recorded at the Nantucket Registry of Deeds, I describe evidence for the innovative syntheses of ancient and introduced ideas about the transfer of land use rights or usufruct by the Indians as well as by the English and for a number of characteristics of the early historic Indian culture at Nantucket.

BACKGROUND.

Nantucket Indian Population. The negotiations of cultural differences between Indians and English to be described here differ in quality from Indian/English interactions in the Massachusetts Bay region, where Indians, although it was not traditional for them to do so, found themselves consistently selling (alienating in exchange for something of value) their lands and land-use rights to the English settlers (Jennings 1975). Major reasons for the different tones of the the cultural relationships may have been that Massachusetts Bay had a rapidly increasing Puritan population after 1635, while Nantucket for the first 50 years of English settlement had no established church and an Indian population much larger than the 100 to 400 English (Figure 1).

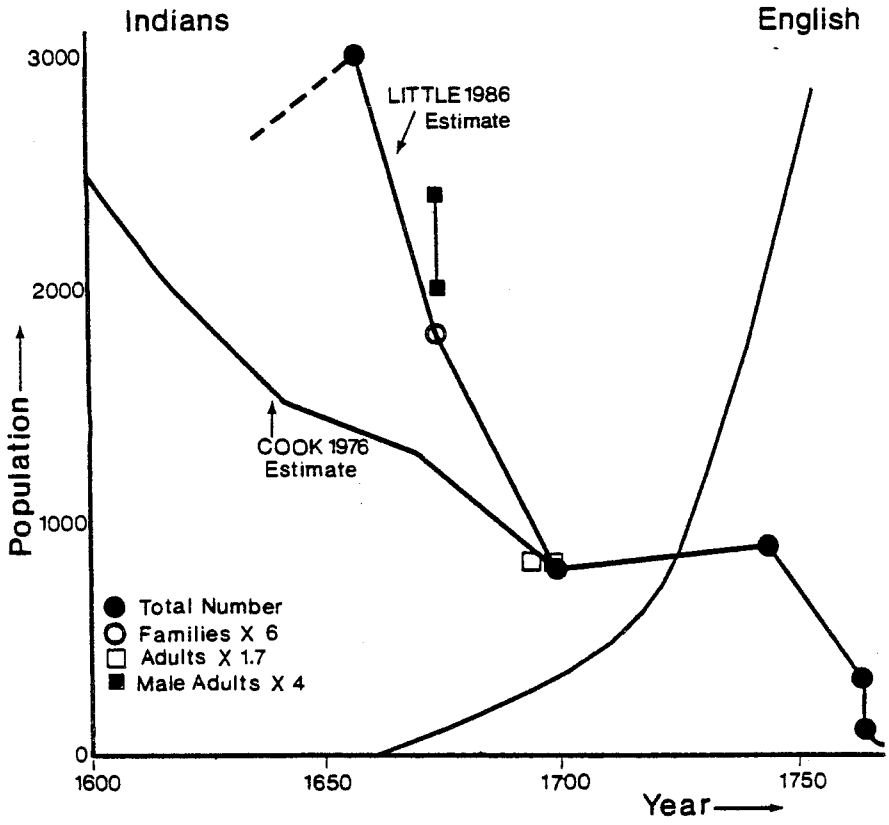


Figure 1. Indian and English (Macy 1835:75) population for Nantucket Island as a function of time, 1600-1765 (see text for references and discussion). The Indian population, Little 1986 Estimate, is shown by a line connecting documented total population numbers and totals converted from the number of families, adults, and male adults by factors suggested by Cook (1976). Cook's estimate for the Nantucket Indian population is also plotted.

American historians, in minimizing the role of American Indians as land proprietors in the new world, have long reduced original estimates of native population (Jennings 1975; Cook 1976; Salisbury 1982). Although modern historians are substantially raising American Indian population estimates, they continue to reduce the presettlement figure of 3000 for Nantucket Indians recorded in 1792 (Macy 1792a) to 2500, 1500 or even 700 (Cook 1976:44; Byers 1987:18; Ewer 1869), because even 2500 gives a density of 50/square mile (20/sq.km), which is enormous when compared with other New England coasts (Cook 1982:45; Salisbury 1982:30). Certainly, if we rely on biased reporters such as English missionaries or leaders of militia for the number of Indian Christians or warriors in 1675, we must be alert for possible inflation. However, John Winthrop, a reputable observer, supported a high population density when he wrote in 1634:

> "Natuckett is an island full of Indians, about ten leagues in length east and west" (Hosmer 1908:138).

Contemporary reports through time for Nantucket show consistent figures; they give a total population of 300 families in 1674 (Letter of Thomas Mayhew 1674 [Gookin 1970:102]), 500 to 600 adult males in 1675 (in a plea for military aid in the New York Council Minutes of 1675 [Hough 1856:89]), 500 adults in 1694 (letter of John Gardner 1694 [Mather 1820:375]), about 500 adults in 1698 (Rawson and Danforth [1698] 1809), and 800 Indians in 1700 (Letter of Earl of Bellomont to the Lords of Trade 1700 [O'Callaghan 1855:4:787]); 900 Indians in 1746 (1746 account which attributed the increase to immigration in response to employment opportunities in the whaling industry [cited by Byers 1987:159]); and 356 Indians at the onset of the Indian sickness in 1763 (Macy 1792a). These are the data (Little 1981b).

According to Cook (1976:4-6, 42), total early historic southeastern New England populations averaged 1.7 times the number of adults, 4 times the number of adult males, and 6 times the number of families. Converting the Nantucket data to total populations using Cook's ratios, we obtain the numbers graphed in Figure 1, where Little's 1986 Estimate shows the population change with time. The population may have peaked between 1620 and 1660 if the island served as a refugium for (hostile) Indians from the mainland (Salisbury 1982:101-109). When the whaling industry expanded in the early eighteenth century, the Indian population increased by immigration, only to drop precipitously as a result of a devastating epidemic from which the Nantucket Indian society never recovered. Cook, on the grounds of density, preferred the lower estimate in Figure 1, but an alternative hypothesis is to accept the data as they are given and interpret the changing numbers recorded by contemporary observers as a temporarily large Nantucket Indian population which declined irregularly after English settlement (Salisbury 1982:25-30) as a result of immigration, emigration and epidemics. Archaeological studies could test these hypotheses.

Nantucket Indians. In the 1660's, Nantucket had four sachemships, that of Pattacohonnet at Tuckernuck Island, and that of Attapeat, in partnership with Spotso and Obadiah, on the west end; all of these were probably originally from, and certainly related by marriage to the sachems of Martha's Vineyard. On the east end Sachem Nickanoose, related by marriage to the Nauset (Cape Cod) sachemship, controlled the north, and Sachem Wanachmamack, the south. The boundaries of the sachemships of Nantucket can be clearly drawn from deeds (Figure 2). Wanachmamack may have had some claim to preeminence; the English called him the 'chief head sachem' of Nantucket, but a number of prominent Indians protested his sales of lands outside of his own territory. The Nantucket sachems deferred to a 'head sachem at Plymouth' (Massasoit) for critical issues such as the murder of an English sailor and the business of rendering stranded whales at Nantucket (Little and Andrews 1982; Little 1976,1981a,1982).

English Settlement. Nantucket Island, with mild winters, a good supply of salt marsh and fresh marsh for winter hay and grasslands for pasture (Bidwell and Falconer 1941), no animal predators and no need for extensive fencing, appeared to the early colonists from England an ideal place to raise sheep, horses, and cattle. In 1660, a group of settlers from Salem (MA) and Salisbury (NH), uncomfortable with the Puritanism of Massachu-

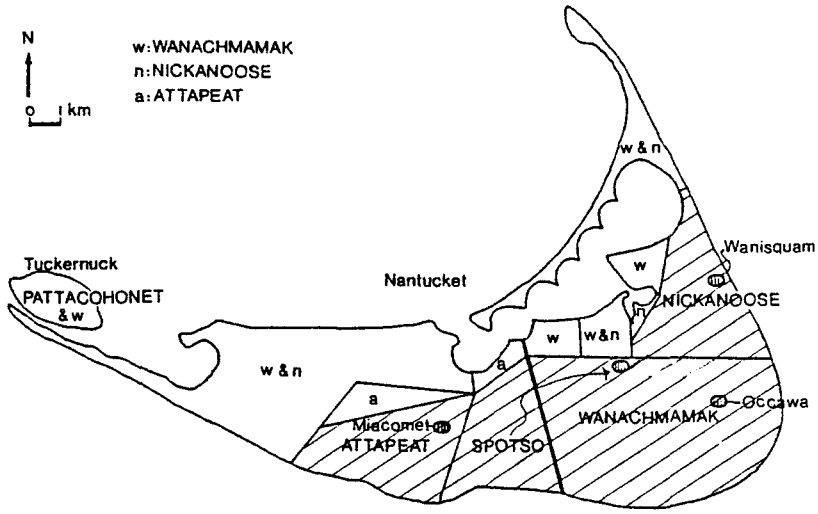


Figure 2. Map of Nantucket in the late seventeenth century showing the land sold to the English by Pattacohonet, Attapeat (a), Wanachmamack (w) and Nickanoose (n), and the territories, also called towns, ruled over by the major sachems from deeds, wills, memoirs (Little 1981a). The heavy black line indicates the boundary between the eastern and western sachemships. The traditional locations of eighteenth century Christian Indian meeting houses are shown by shaded ovals. Spotso married Nickanoose's daughter, sold his tract of land to the English and was given a small piece of land for a dwelling and meeting house by Wanachmamack.

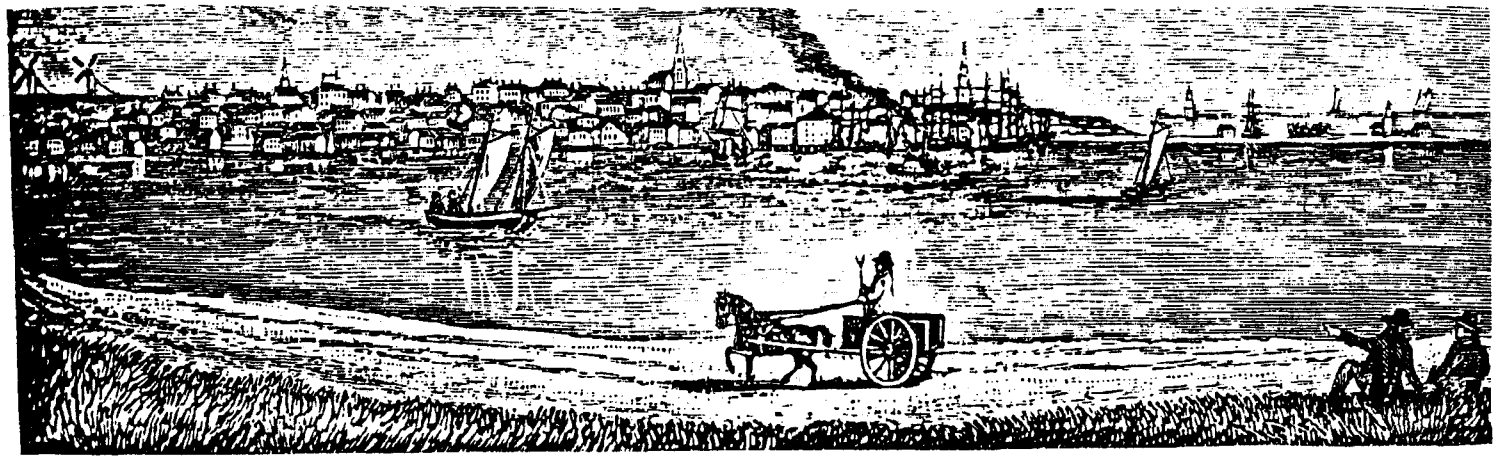


Figure 3. A Nantucket calash in 1839, showing the box-cart with its large wheels, suitable for travel on sandy roads, and the driver standing (Barber 1839).

setts Bay, purchased from Thomas Mayhew the Nantucket rights he had bought from Sir Ferdinando Gorges and the Earl of Sterling, the rights he had bought from Nantucket sachems to the west end of the island and all the meadow hay and pasture grass on the entire island. The deed that included all the grass was later and perhaps justifiably challenged by the sachems when they wished to own horses (NCD 3:93; Macy 1835:4-8).

Horses and Horse Commons. After allotting a 22 acre houselot to each shareowner, the proprietors, after an English pattern, held the rest of their land in common, chiefly as pasture for sheep, cattle and horses (Little 1976); the stage was set for a Tragedy of the Commons (McCay and Acheson 1987; Cronon 1983). As early as 1669, after recognizing severe overgrazing (as well as an increasing shortage of timber [Little 1981c]), the proprietors, in response, stinted the commons. That is, they limited each of the (now) 27 shares to 40 sheep, about three cows and one horse, impounded excess animals and fined their owners (NCD 1:13b). Each horse was equivalent to 12-16 sheep, or to two cows; these equivalencies changed with time. When the Indians, with a population larger than that of the English, found themselves prevented from keeping horses on their own lands, they let the English know in no uncertain terms that this would not do (Little 1976). After 13 years of negotiations (Table 1), the four major sachems in 1682 (now Jeptha son of Wanachmamack, Musaquat son of Attapeat, Spotso and Nickanoose) again gave the English all their grass, and the English gave the sachems in return a total of about 87 horse commons. One Indian later recorded that the sachems "reserved" (NCD 3:28) some horse commons out of the meadow and pasture rights sold to the English. In any case, a Tragedy of the Commons was averted by English and Indian cooperative control of the use of a limited resource, hay grass. (They did not do so well with timber; by 1712 even "wigwam poles" and firewood were being imported [N. Starbuck 1683-1744:62].)

Although horses are not as economical or powerful as cattle or oxen (Bidwell and Falconer 1941 [1925]), Nantucket Indians appear to have desired horses over cattle or sheep. Nantucket deeds, probate records, and accounts for fourteen Indians between 1715 and 1770 list 11 calashes, 1 cart, and 5 saddles (Table 2). Only four cattle and no sheep are listed in these records. These data suggest that the Indians most often used horses for transport of freight or passengers in a Nantucket box-wagon or two-wheeled cart called a calash, with sometimes a folding top and kitchen chairs for passengers (Little 1980a; Figure 3).

A "horse common" (NCP 2:158; Figure 4) was a right to, "Erbedge, or Pastureg, for on horse one the Island of Nantucket", represented by a deed with the usual English legal boiler plate, such as, "bargain for, sell, alienate, ratify and confirm", and "binding me, my heirs and assigns for ever." The 108 herbage deeds at the Registry of Deeds at Nantucket provide the data for this paper.

ANALYSIS OF HORSE COMMONS DEEDS

Deeds for horse commons conveyances among Indians and English between 1660 and 1760 have been collected, tabulated by sachemships, and abstracted in Tables 3 and 4.

TABLE 1. ENGLISH GRASS PURCHASES AND HORSE COMMONS GRANTS TO THE INDIANS (Little 1976).

1661 The English proprietors purchased all the meadow grass and pasture grass on the island from Wanachmamack (Macy 1835:6-8).

1668 (NCD 1:8b) Spotso granted mowing, pasturage, timber to English, as soon as Wanachmamack paid him 40 shillings.

1669 (NCD 1:13b) Commons stinted. 1 share: 40 sheep (max), 1 horse (max), 6 cows; 1 horse = 2 cows; 1 cow = 6-8 sheep. Indian horses empounded and owners fined.

1669 (NCD 1:13b) "No Man Shall sel any Liveing horse mare or colt to any Indian on the Island upon the penalty of five pounds".

1671 (NCD 1:17b) Nickanoose protested.

1672 (NCD 1:22) "Wawinnit, Nekanoosoos son, hath liberty to buy a horse".

1672 (NCD 1:24) "that any inhabitant hath liberty to sel a horse to Jeptah, the Indian" (son of Wanachmamack). 1672 (NCD 1:33b) "liberty to the Indian Sachems to keepe 2 or 3 horses more on condition that they bind themselves by promise to keep no more forever".

1675 (NCD 3:41) Nickanoose granted Jutte rights to keep 6 cattle.

1677 (DCD 1:38) Nickanoose deeded grass to brothers; acknowledged 1660 grass deed (Starbuck 1924:21).

1682 (NCD 2:41,42,48,49) purchase of three winter feed deeds (Spotso, Nickanoose and Jeptha (son of Wanachmamack) by James Coffin, John Swain, William Worth.

1682 (NCD 2:48) Jeptha granted rights to keep 22 neat cattle or horses on the commons. If he wished to sell, had to offer to town first.

1682 (NCD 2:48) Spotso granted by town rights to keep 15 cattle or horses ("we promised when that quantity was full he should keep thre Cattell more").

1689 (NCD 3:69) Musaquat in exchange for herbage, grass, and winter feed, to town, granted rights to keep 15 cattle, neat cattle, or horses, 8 on English lands, 7 on Musaquat's lands.

1716 (NCD 3:91) Daniel Spotso to James Coffin, renewal of land deed, renewal of herbage deed to the English, and promise of renewal of this deed, for 10 lb, confirmation of 8 HC previously granted, and 2 new HC grants.

Missing horse commons may have been unregistered or held later than 1760, and there are uncertainties in the data and analysis, but the number of horse commons sold by individual sachems corresponds roughly to the number granted to them. Study of Tables 3 and 4 provide a rare glimpse into a seventeenth century Massachusetts Indian community, as well as evidence for innovative strategies of accommodation by both Indian and English leaders.

Sachems. Modern ethnohistorians agree that in Massachusetts, the Indian town with its sachem was the primary political, social, and economic unit, with an episodic or segmentary organization sometimes assembled from cooperating villages (Salwen 1978; Salisbury 1982; Thomas 1985). And, according to early observers, every sachem knew precisely the bounds of his own lands (Winslow 1841:360-363; Wood 1865:83-85; Simmons 1986:12-13). Figure 2 shows the boundaries of the sachemships of the four leading Nantucket sachems, Wanachmamack, Nickanoose, Attapeat and Spotso, together with the names and approximate locations of their meeting houses in the late seventeenth century as determined by land deeds and memoirs (Little 1981a). Although the meeting houses may have been at the chief villages, assumptions about the seasonal use and permanence, area and population density of an historic Nantucket Indian village are unwarranted at present.

Despite the English proprietors' efforts to establish Wanachmamack as a "chief head sachem of Nantucket" for the purpose of validating the Indian land sales on the island (Little 1976), the proprietors gave about 17-25 horse commons to each of four sachems, indicating that Wanachmamack was one among four rulers on the local level. Table 3 also indicates that, with a few exceptions, horse commons did not move between sachemships.

A sachem ruled with the advice of his chief men and endeavored to manage his town's affairs by means of love (NCD 3:41) and redistribution of valuables (Gookin 1970:20; Little 1980b), which at Nantucket included horse commons. Because horse common deeds often contain a history of ownership, they record a sachem's lineage or genealogy, as shown in Figure 5.

Women. The evidence for Nantucket Indian kinship structure recorded by patrilineally oriented Englishmen exhibits patrilineal elements. Suggestions of matrilinear kinship in southern New England (Simmons and Aubin 1975; Grumet 1980) have not been confirmed at Nantucket, although a record does exist of a governing "sachemess" at Miacomet in 1750 (NPR 1:74). However, recently a manuscript catalogued during an archival project at the Nantucket Historical Association Research Center proved to be an unregistered deed of 1660 (Adam 1660) in which Nickanoose, who had six sons and three daughters, gave one half of his land to one daughter, Askammapoo (Figure 5; Figure 6). Since her brother, Wawinet's, rights in commons reverted to her at his death (NCD 2:40; DCD 1:355; 2:211), I propose that Askammapoo's sons, Daniel and Joshua Spotso, inherited 9 to 13 of their grandfather Nickanoose's horse commons, as well as their father, Spotso's 18 (Figure 5). This would help explain how it was that Daniel and

TABLE 2. HORSES IN NANTUCKET INDIAN DEEDS, PROBATE INVENTORIES, AND ACCOUNTS (Little 1980a).

	1715 Pocana	1724 Jafet	1727 Wooso	1728 Dimon	1727 Netowa	1737 Duch	1740 Micah	1744 Abel	1747 Mamock	1748 Spotso
Horse:		+			+	+	+	+	+	+
Calash:	+		+	+		(cart)	+	+	+	+
Tackle:						+	+		+	
Saddle:		+				+	+	+		

	1750 Phillips	1763 JMicah	1765 Quady	1770 Tashime
Horse:	+	+	+	+
Calash:	+	+	+	+
Tackle:	+	+	+	
Saddle:		+		

Figure 4. Transcription of a representative horse common deed (NCD 3:28).

This instrament of Cr Bargain and Sale made this fifteenth day of May, one Thousand Seven Hundred and one, wittneseth that I Henry Breatten, A Sachem one the Island of Nantucket, have bargained and sould, and doe by these presence, Bargain for, sel Aline- Gratifie, and Confirm, unto John Gardner of Nantucket, aforsd, his heirs and assigns for ever, Erbege, or Pastureg, for on horse one the Island of Nantucket, aforsd, and is of the Liberty, my Father Mussacut, Reserved by agreement, with the Inglish, as by his sd Agreement may att large apear, for a valuable Satisfaction, Bond, fidie, by John Gardner, Payd, and by me Henry Breeten - received, to my full Satisfaction and Content, the Recept whereof I doe hereby acknowledge, before the Signing and sealling of these presents, I Henry Breeten, have and doe therefor, by these presents, sel aline, Ratifie, and Confirm, unto John Gardner, aforsaid his Hairs and assigns for ever, Erbeg, pasturege or Comons, for one horse one the Island of Nantucket, To them their heirs and assigns for ever TO HAVE AND TO HOULD, and peaceably to injoy, the same for ever, Hereby binding me my heirs and assigns for Ever, to warantise and defend said Sale, as above against all persons, whatsoever - Laying Claime theirto, by from or under me, my heirs or assigns for ever, in wittnes of all the above specifyd promises, I have sett too my hand and Seale, the day and year above written The mark of

Henry Breten

Signed Seald and delivered in the presence of

Desire

Mehetable Gardner

The above Written Instrument was Acknowliged by Henry Bretton to be his act and Deed on Nantucket, October the 8th 1701 before me-

William Gayer Justice Peace

Joshua Spotso sold at least 35 horse commons (Table 3).

Askammapoo, heretofore forgotten by Nantucket's historians, was a daughter of a sachem of the east end of the island, who married Spotso, a sachem of the west end; Askammapoo and Spotso probably provided the basis for the Nantucket Romeo and Juliet legend of 'Wonoma' and 'Autopscot' whose marriage helped establish peace on the island (Freeman 1807; Little 1982). Her presence, as "Spotso's Squaw", as a witness to a land sale by her brother Wawinet (NCD 3:77), her assent to a land sale by her son Daniel Spotso, "with the approval of my mother" (NCD 3:51), and the power of attorney she, "squaw-sachem Askammapoo" (Bragdon 1981:45), gave Daniel Spotso begin to define the powers of perhaps the first historically important Nantucket woman.

Rank, Marriage and Post-marital Residence. There were two classes among the southeastern Massachusetts and Nantucket Indians. Most Indians, "the common people" (from a Nantucket court record of 1667 [Worth 1902:118]), "of ordinary Ranke" (Wood 1865 [1634]:85), did not own deeded or probated land or horse commons. The leading or sachem-related Indian families, "equal to [the sachim] in birth" (Winslow 1841 [1624]:361), are mentioned in Nantucket deeds and wills involving land or horse commons. The common Indian names show up only rarely (see, for example, the list of those who died of a sickness in 1763 [Little and Sussek 1979).

We would expect the native people to show a pattern of exogenous marriage with unrestricted residence (Salwen 1978). Indeed, although our data are fragmentory and pertain primarily to those of high rank, Nantucket Indian wives are heirs of a different sachemship than their husbands (Little 1981a). Thus, Washaman (of the west end) married Betty Wunnattuhquanmow (Squaw Sachem at Martha's Vineyard), and they lived seasonally on both islands; James Shea (Miacomet) married Jemima (Occawa), and they owned land at Miacomet and Occawa; Spotso married Askammapoo (Wannasquam), and they lived on land given them by Wanachmamack (DCD 1:6); Eben Cain (Occawa) married Su Ezeky, a grand-daughter of Judah (Wannasquam), and they lived at Wannasquam. Benjamin Joab (Wannasquam) married Hannah (Occawa). A daughter of Nickanoose (Wannasquam) married Joseph Quason (Harwich), and they owned land at Squam and Harwich. Jethro, eldest son of Nickanoose and his first wife, married into the Quason family of Harwich where he subsequently lived (Nickerson 1958).

Early observers (Winslow 1841 [1624]:361) noted the high rank of a sachem's first wife compared to that of subsequent wives. Indeed, Jethro, son of Nickanoose, left Nantucket in anger at his father's taking a second wife of low rank (Macy 1792b), and the six children of Nickanoose and his second wife (Figure 5) altogether received only three horse commons. In summary, we can demonstrate both two ranks and a pattern of exogamous marriages with unrestricted residence from our limited data at Nantucket.

Individuality of Sachems. The sachems' handling of horse commons exhibits individuality in response to English pressures, i.e., they were not (all) passive participants in socio-cultural change.

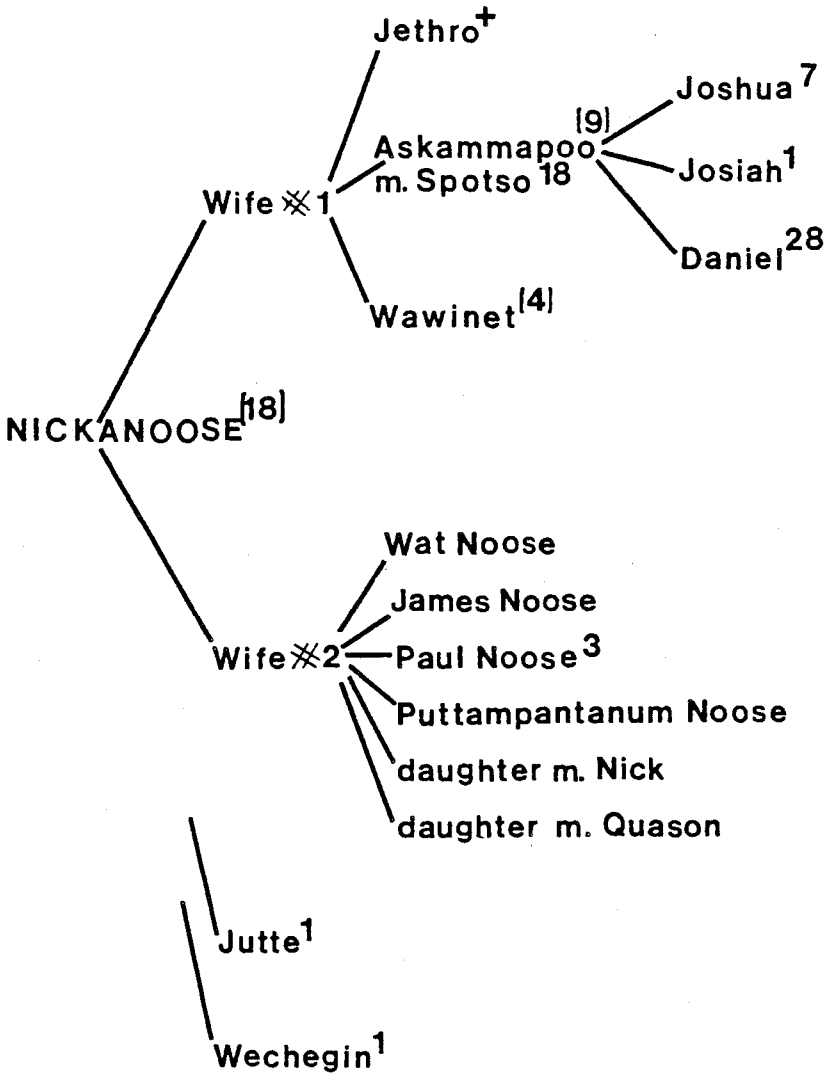


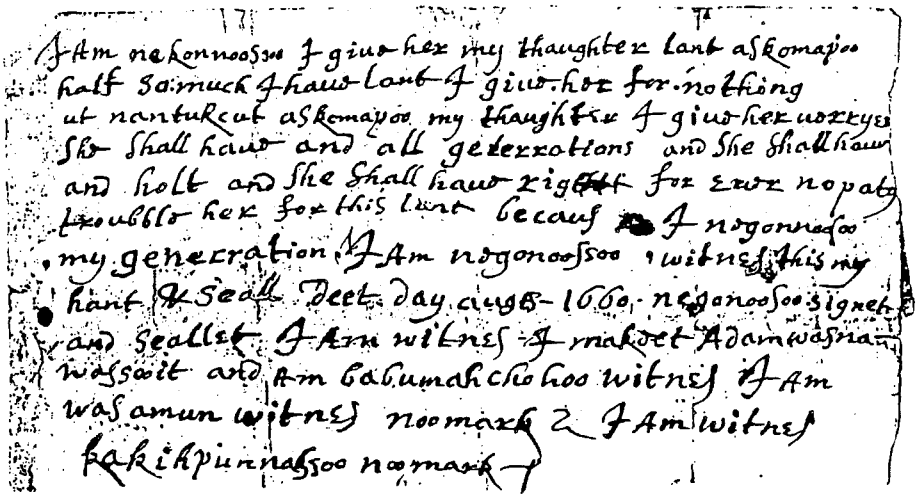
Figure 5. The horse commons of Sachem Nickanoose and his heirs and grantees, showing from left to right, Nickanoose, his children and certain grandchildren (Little 1981a:7). Jutte, a brother, and Wechegin were both close relatives of Nickanoose. The superscripts after names indicate the number of horse commons owned by a person. The brackets indicate assumptions. The + after Jethro signifies that Jethro rented 4 HC from Wanachmamack (Little 1976).

Wanachmamack and his son Jeptha incorporated horse commons into their own system by assigning them, at a meeting of the great men of the town, to senior men, sons and succeeding sachems, as well as to the English in return for cash. Their 25 transactions show a considerable flexibility. By contrast, Attapeat's heirs exchanged most of their 16 horse commons one at a time to the English for cash or credit, rather like a periodic exchange of gifts.

Nickanoose, a skilled negotiator with the English (Little 1976), died about 1682 and records of his grant of horse commons are lacking. However, men of his town, Paul Noose, Wechegin and Judah, account for five of Nickanoose's horse commons, and I have proposed that up to 13 others were passed by inheritance through Wawinet and his sister Askammapoo, to her husband Spotso and their sons Daniel and Joshua Spotso (Figure 5), who sold 26 horse commons of Spotso. The 4 commons rented by Jethro from Jeptha, son of Wanachmamack, were not of Nickanoose's original allotment, probably because of antagonism between Jethro and his father, Nickanoose (Macy 1792b).

Daniel Spotso, a son of Spotso and Askammapoo, inherited most of his mother's and father's horse commons. Between 1690 and 1709 he sold at least 19 of these primarily to the English for cash. The details illuminate a complex and astonishing Indian-English interaction in which leaders of each culture tried to accommodate the other's traditional cultural patterns (compare Jennings 1975). The use in the deeds at this time of the term, "for a valuable consideration," distinguishes between the exchange of something of value for land use rights, and a gift or assignment of usufruct. Apparently Daniel did not at first believe that he had in 1691-92 permanently alienated or given up three horse commons to John Worth and Richard Gardner, because the deeds did not specify the heirs and because a sachem would not normally have alienated land use permanently. In 1708 Daniel's horse common deeds to Worth and Gardner were rewritten or renewed, to include the heirs of these grantees. One assumes something of value came to Daniel. Daniel Spotso, a worthy successor of his grandfather Nickanoose, eight years later in 1716 persuaded the English to reconfirm or renew a grant to him of eight horse commons. And, in return for accepting in tribute-like fashion an English gift of two more horse commons, he promised periodic renewal of deeds for land (Table 3). This action by the English proprietors is remarkable because both tribute and periodic land assignment renewal characterize Nantucket Indian to Indian land deeds but not, hitherto, English deeds (Little 1980b). After 1716, most of Daniel Spotso's horse commons sales were to Indians, doubtless enhancing the relations of this emergent big-man with members of his town.

Innovation. Nickanoose issued the first horse common deed in 1675 to his brother Judah in return for "penys all the year in victualls and cloths" (NCD 3:41). This deed was certainly based on English usage (see Oxford English Dictionary under 'common'), but the internal evidence (Little 1980b) suggests it was written by an Indian by the name of Tehas, independently of any English supervision. Nickanoose's grandson, Daniel Spotso, an active land merchant and emergent big-man similar to an Indian fur trader in the Connecticut Valley described by Thomas (1985:139), also demonstrated creative responses



I Am nekonnoossoo I give her my thaughter Lant askomapoo
half So:much I have Lant I give.her for.nothing
ut nantukcut askomapoo my thaughter I give her vorrye[r]
She Shall have and all geterrations and She Shall have
and holt and She Shall have rightt for ever nopaty
troubble her for this Lant becaus I negonnoosoo
my generration. I Am negonoossoo . witnes this my
hant & seall deet day augts-1660 - negonoosoo.signet
and seallet I Am witnes - I makeit Adam wasnan
wassooit and Am babumahchohoo witnes I Am
wasamun witnes noomark 2 I Am witnes
kakihpunnassoo noomark T

Figure 6. Facsimile and transcription of deed in which Nickanoose gave land to his daughter, Askomapoo, witnessed by Adam, Wasamun and Kakihpunnassoo, and made by Adam (Adam 1660; courtesy Nantucket Historical Association). Most of the English deeded land transfer concepts as well as some Indian concepts have been negotiated here by Nantucket Indians. The phonetic spelling gives clues to Indian pronounciation.

to the new English ways, as we have seen. The English, too, exercised creativity when dealing with Indians through horse commons. First of all, they responded to the Indians' lead. In addition to creating, loaning, giving, buying and selling horse commons, and using horse commons for tribute-like payments to the Indians in return for deed renewal, the English tried to meet the Indian expectations of deed renewal through rentals rather than outright purchases. The Indians also used the concept of renting horse commons, which complicates our counting of horse commons. And, finally, the English exchanged horse commons also among themselves. John Gardner bought one from Henry Breton to give to his son-in-law, Jethro Coffin in 1703.

Sheep Commons. As the Indian lands were sold to the English proprietary, they became part of Nantucket's common and undivided lands, and a horse common deed came to mean land as well as grass. Possibly horse commons at one time may have evolved to mean a right to build a framed house on the island, as for example, in the case of Spotso's, Phillips' and Tashima's houses (Little 1980a) and possibly even the Jethro Coffin house (Chase 1986). In the late eighteenth century, when sheep had displaced horses and cows as the economically important animals on the island, a sheep common represented a specific fraction of a parcel of undivided land; they still exist. These developments (Macy 1835:21; Starbuck 1924:647-650; Zube and Carlozzi 1967:82-85; Worth 1904:198) lie outside the scope of this study.

Total Price Paid for Nantucket. Many histories incorrectly say that the English purchased Nantucket for 30 pounds and 2 beaver hats. By 1664 in addition to the beaver hats the English had spent 101 pounds for the west end, and would repurchase from the Indians at least the 64 horse commons deeds reported here for 423 pounds (6.6 pounds = average horse common price), as well as buy the rest of the island piece-meal for a total amount yet to be calculated. Tradition that the English paid the Indians fairly for the land at Nantucket (Macy 1835) seems valid.

SUMMARY

The issuing of horse commons deeds by the English to four sachems was an innovative strategy to meet the demands of the numerically superior Indians for the right to own horses, while maintaining control of the commons in order to avoid a Tragedy of the Commons. Once the sachems had rights to the English commons, both societies cooperatively as well as independently created a complex redistribution system, as "active participants in shaping their own destiny" (Thomas 1985:157). Horse commons were issued, given, sold, purchased, and rented by both the English and the Indians within and between their communities.

Through horse commons deeds of the seventeenth and early eighteenth centuries, we have been able to obtain a rare glimpse of Nantucket Indian politics, lineages, marriages and post-marital residence patterns, the strong political role of a women in connection with land and usufruct, an emergent Indian big-man, and the very individualistic nature

of their sachemships. Like deeds written by Indians (Bragdon 1981), folk tales (Simmons 1986) or archaeological materials (Thomas 1985; Brenner 1984), this assemblage of public documents provides a new and exciting contact with southeastern Massachusetts Indians of 300 years ago, heretofore viewed chiefly through culturally or politically biased tradition (Starbuck 1924; Byers 1987). Indeed, data such as these are the lure of ethnohistoric studies.

ACKNOWLEDGEMENTS

I should like to thank Sandra M. Chadwick, Nantucket County Registrar of Deeds, Dr. Louise Hussey, Research Librarian, and Jacqueline Haring, Curator of Research Materials, at the Nantucket Historical Association Research Center, and Dr. Dena F. Dincauze, University of Massachusetts at Amherst, for their help and encouragement. An early version of this paper was presented at the 1986 meeting of the American Society for Ethnohistory at Charleston SC.

TABLE 3. HORSE COMMON DEED TRANSACTIONS FROM THE NANTUCKET REGISTRY OF DEEDS. NCD Book:Page: vc:valuable consideration; HC: horse common; other than first transactions [].

WANACHMAMACK: granted 22 and 2 or 3 HC in 1672 and 1682..

4:12 1690 Jeptha sachem to James Cowkeeper (Quedanesape), 2 HC of "that liberty I reserved of the English sale", 3 lb
[5:100 1746 lame Zackary (Zachriah Quidonsaps, heir of Quidonsops [NCD 3:48]) to Nathaniel Folger, 1 HC of Jeptha, 20 lb for 10 yrs]
[7:7 1764 Esther Taster, Indian, to Richard Coffin, 1/4 HC of grandfather Lame Zacheriah, 5 lb 6s]
[6:553 1764 Esther Taster to Richard Coffin, 1/4 HC of mother, dau of Lame Zachariah, 5 lb 6s]

2:15 1690 Jeptha to Jethro, son of Nickanoose, 4 Cow & 2 HC, 4 lbs (10 years)
[8:49 1772 Abigail Jethro, Indian spinstress, to Benjamin Bunker, 1/3 HC, 5 lb 6s 8p]
[9:31 1774 John Jethro whale fisherman to Jonathan Burnell, 10 sheep commons, or 2/3 of 1 HC, 16 lb]

2:53 1691 Jeptha (Soosackaroo) to James Coffin 2 HC, vc
[3:25 1701 James Coffin to John Spoonmerchant (alias John Asherman, Indian Minister) and Nicklos, his daughter, Indian, 2 HC of Jeptha, vc]

3:31 1701 Aball sachem to Pimouck 1 HC of father Jeptha, paid by W. Gayer, vc
[3:50 1702 Pimick(?) to Nathl Starbuck, 1 HC of Abel, 3 lb]

3:22 1701 Moamug (Moommak) an Indian to Mica, 1 HC, vc
[4:34 1722 Tom Jesper and Margaret rent to Levi for 14 years (see below)]

3:63 1705 Panjami to Thomas Bunker, 1 HC from Abel & his father Jeptha, 3 lb 10s

3:66 1706 Nomose to Jonathan Bunker, 1 HC from Quequenop late sachem, 40s
[4:34 1722 Tom Jesper and Margaret his wife, former wife of Cain a Sachem to Levi, 1 HC sold by Mooamok to Micah of Mattaquitchame, 1 HC given by Quequenup to Nomosah, now held by proprietors, 10s yearly rent for 14 years]

3:64 1706 Nomose to Samuel Coffin, 1 HC of Quequenop late sachem, 40s

3:65 1706 Wonossoni to Samuel Coffin, 1 HC, 2 lb 10s

3:113 1717 Abal Sacham to Cadoode alias Asasquape, 1 HC of Jeptha, 2 lb 15s

3:130 1718 Abel to Cadoode, 1 HC of Jeptha, 4 lb 10s pd to Jonas a negro man
[6:280 1761 Mark Caudude to Z Macy, boat builder, 1/2 HC, 13 lb 6s 8p]

4:91 1731 Jeptha to nephew James Mamoock 2 HC, at meeting of great men, renewed by

Ben Abel.

5:88 1746 Eben Abel, son of Ben Abel late sachem, to Benje Joab & Hannah (Eben's sister), then dau Jemima, at death reverts to Eben Abel, 1 HC

5:109 1747 Eben Abel, laborer, to my ant Hannah wife of Benje Joab, 2 HC which belonged to my father Ben Abel late Sachem, then to Jemima, then reverts to me

5:254 1753 Ebenezer Abel, sachem to Benjamin Jobe & wife, 2 HC, 6 lb 13s 4p, paid by Ebenezer Gardner to town after decease of Jobe.

4:185 1739 James Shay (Attapeat's son), wife Jemima, daughter of Cain sachem, keeps 1 HC. [5:25 1742 James Shay to Ben Abel to Barney Spotso, 1 HC, 8 lb]

5:37 1743 James Shay to Barney Spotso, 1 HC, 14 lb

5:52 1744 James Shay to John Potter (of Miacomet), indian, 1 HC, 13 lb

5:60 1744 James Shay to John Macy 1 HC, 20 lb

6:421 1762 Joseph Amos, fisherman of MV, & wife Sarah to Z. Macy, 1 cow or 8 sheep commons, 20 a & dwelling house of father Samson Nomanash for 15 lb.

7:31 1764 James Panjame fisherman to Zaccheus Macy, 1 HC, 18 lb 13s 4p

7:216 1767 Sarah Amos Indian of MV to Z. Macy 1 cow or 8 sheep commons and 20 acres in Gibbs Swamp of her sister, Abiah Hagja, 15 lb.

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MUSAQUAT, son of ATTAPEAT: granted 16 and 2 or 3 HC in 1672 and 1689.

2:(inside cover) nd Musaquat gives a horse to brother Rubin, then to father

1:80 1689 Musacut to Desier, 2 HC, vc
[1:81 1689 Desier to John Gardner, 1 HC, vc]
[3:29 1701 Desire to John Gardner, 1 HC of Musaqut, 5 lb]

2:60 1689 Musaquat sachem to James Coffin, 1 HC, vc

1:83 1689 Musaquot to W. Worth, 1 HC, vc
1:82 1690 Musawuot to W. Worth, 1 HC, vc
2:71 1690 Mussaquet to William Worth, 1 HC, 3 lb 10s
2:63 1690 Mussaquat to William Worth, 1 HC, 3 lb 10s
[3:126 1718 W. Worth freed Ishmael and granted him 2 acres & 1 HC]
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3:51 1690 Musaquat to James Cowkeeper alias Quedansops, 1 HC, 5 lb
[3:48 1701 Zachriah Quidonsaps heir of Quidonsops to George Gardner, 1 HC, 10 lb]

1:84 1690 Musaquot to John Gardner, 1 HC, 3 lb

1:93 1691 Mussacut to James Gardner, jr, 1 HC, 3 lb

2:57 1692 Mosoquet to James Coffin, jr, 1 HC, 3 lb

3:24 1693 Mussacut to John Asharman, Indian Preacher, 1 HC, 3 lb
[3:27 1693/1701 John Asherman to James Coffin, 1 HC of Musaqut, vc]

3:33 1693 Mussacut to Solomon, 1 HC, 3 lb

3:36 1693 Mussacut to Tom Dogged, 1 HC, 3 lb
[3:37 1697 Tom Dogget to Richard Swain, 1 HC, 30s]

3:13 1701 Henry Breton (son of Musaquat) to James Coffin, jr, 1 HC of Musaquat, 3 lb.

3:28 1701 Henry Breton to John Gardner, 1 HC of Mussacut, vc
[3:28 1703 John Gardner to Jethro Coffin, 1 HC of Henry Breton]

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NICKANOOSE: granted 15 HC (by assumption) and 2 or 3 HC in 1672 and 1682.

1:22;1:33b 1672 Wawinnet, son of Nickanoose has one horse

3:41 1675 Nickanoose to his brother Jutte (Judah), rights to keep 6 cattle
[1718 Ezeky to town, 6 cattle rights, in return for 1 HC (PR:48).]
[4:98 1732 Ezeky to son Titus 1 HC, 8 lb 5 sh]

3:47 1701 Paul Noos, son of Nickanoose to Jonathan Starbuck, 1 HC, 50 sh
3:49 1702 Paul Noose to N. Starbuck, jr, 1 HC, 2(?) lb
3:57 1703 Paul Noose to Stephen Coffin, jr, 1 HC, 40 sh

5:277 1754 Martha Wechegin, spinster, to son Daniel Wechegin, 1 HC

[Assumption: Askammapoo, Nickanoose's daughter and grantee of one half of his sachemship (Adam 1660), and heir of her brother Wawinet, managed 9-13 HC (see Spotso and Daniel Spotso).]

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SPOTSO: 15 & 3 (in his own right) plus 9-13 of his wife, Askammapoo (assumption).

1:85 1690 Joshua Spotso Sachem to John Gardner, 1 HC of Spotso, 2 lb
1:86 1690 Joshua Spotso to N. Starbuck, 2 HC of Spotso, 2 lb 10 sh
1:87 1690 Joshua Spotso to W. Worth, James Coffin, J. Swain, 1 HC of Spotso, vc
1:91 1690 Joshua Spotso to John Gardner, 1 HC of Spotso, 41b 10s

2:37 1691 Daniel Spotso & Joshua Spotso to Peter Coffin, 4 HC of Spotso, vc

2:60 1690 Daniel Spotso to Israel Jafets, 1 HC of Spotso, vc
[3:21 1701 Isreal an Indian to James Coffin jr, 1 HC of D. Spotso, 3 lb.]

2:41 1692 Daniel Spotso Sachem to John Worth, 1 HC of Spotso, vc
2:64 1691 Daniel Spotso to John Worth, 1 HC of Spotso, vc
[3:3 1708 D. Spotso to John Worth, renewal deed of 2 HC includes heirs]

2:67 1691 Daniel Spotso sachem to James Coffin, sen, 2 HC of Spotso, vc
2:67 1691 Daniel Spotso to Richard Pinckome, 1 HC of Spotso, vc
2:68 1692 Daniel Spotso to John Swain, jr, 1 HC of Spotso, vc
3:59 1692 Daniel Spotso to Joseph Nason, 1 HC of Spotso, vc
2:71 1692 Daniel Spotso to Joseph Nasson, 1 HC of Spotso, vc

2:76 1692 Daniel Spotso to Richard Gardner, 1 HC of Spotso, vc
[3:9 1708 D. Spotso to R. Gardner, renewal deed of 1 HC includes heirs]

3:15 1692 Daniel Spotso to William Gayer, 1 HC of Spotso, 50 sh
3:30 1701 Daniel Spotso to W. Gayer, 1 HC of Spotso, bought for money from Nicklos 9 or 10 years ago.
3:19 1701 Daniel Spotso to Eliezer Foulger, 2 HC of Spotso, 5 lb

[In 1708 Askammapoo gave son Daniel all of the commons or herbage rights she inherited from her brother Wawinet (DCD 2:211). 'Daniel' was crossed out and 'Josiah' written into the deed after it was registered. In 1708 also, Askammapoo gave her 1/3 dower right of Spotso's estate to son Josiah (DCD 2:209), who owned a horse when he died in 1748 (Little 1980a).]

3:15 1709 Daniel Spotso to Edward Allen, 1 HC of Spotso, 50 sh
3:17 1709 Daniel Spotso to Stephen Pease, 1 HC of Spotso, 3 lb
7:188 1709 Daniel Spotso sachem to Nathaniel Paddack, 1HC of Spotso, 3 lb
[10:250 1784 Paul Paddack to T. Delano, 1/2 HC]

DANIEL SPOTSO: Granted 8 HC before 1716 and 2 HC in 1716 from the proprietors (NCD 3:91).

3:20 1709 Daniel Spotso to Daniel Russell, 1 HC, 3 lb

3:76 1709 Daniel Spotso to Eleazer Folger, 1 HC, 3 lb
3:103 1717 Daniel Spotso to Samuel Coffin, 1 HC got in 1716, 3 lb.
3:109 1717 Daniel Spotso to Samuel Coffin, 1 HC got in 1716, 4 lb.
3:107 1717 Daniel spotso to John Aaron of Mattaquichame, 1 HC, 3 lb 10 sh
3:128 1718 Daniel Spotso to Jonathan Micah, 1 HC, 5 lb
3:147 1720 Daniel Spotso to Sam Humphrey, Indian, 1 HC, 3 lb
[5:220 1752 Samuel Humphrey, hangman, to son-in-law John Tasheme, 1 HC, 1 lb 10s lp 2f & 5/15 of father's mortgage]

5:221 1752 Samuel Humphrey to John Tasheme, 1 HC as gift, S.H. has use of during his natural life. See also 1701 John Asherman 2 HC.
[4:58 1727 John Tasheme, 1&1/2 HC to son John Tasheme, 1&1/2 HC to grandson Benjamin Tashime.]
[7:11 1764 Ben Tashme minister to Richard Coffin, 1 HC, 26 lb 13s 4p]
[NCP 3:165 1770 Ben Tashime died, owning 1 HC, 12 lb]
[13:374 1794 Sarah Easop, Indian (grandaughter of Benjamin Tashama) to Silvanus Starbuck, 3 cow commons & 15 acres, 30 lb.]

4:12 1721 Daniel Spotso sachem to Micah Phillips, Indian laborer, 1 HC, 6 lb
[NCP 2:158 1750 Micah Phillips died owning 1 HC at 120 lb]
[6:115 1758 Daniel Phillips to Ruben Gardner, 2/3 HC of father Micah Phillips, 18 lb 13s 4p]
[6:489 1763 Samuel Phillips to Samuel Starbuck, 6 sheep commons, 9 lb]

5:147 1748 Josiah Spotso owned a horse at his death.

Unassigned:
4:39 1726 Proprietors to Ichabod, laborer, 1 HC during life of sd horse, he renounces all other priviledge.

TABLE 4. ENGLISH PURCHASERS OF HORSE COMMONS.

1711 (3:60) Group of English gave to town 47 horse commons purchased of Indians, recorded 1712 with additions in 1731 shown in []. 36 of these purchases are documented in Table 3 as indicated by () below.

(5)James Coffin: 4 1/2
(1)Richard Gardner: 2
(1)Stephen Coffin jun: 2
(2)Nathaniell Starbuck: 3
(0)Jethro Starbuck: 2
(2)Nathaniell Starbuck jun:2
(3)James Coffin jun: 3
(1)Eleazer Folger jun: 1
(0)Ebenr Coffin: 1
(2)Samuel Coffin:1
(1)Richard Pinkham: 1
(1)Edward Allin: 1
(1)John Swain jun: 1
(1)George Gardner: 3

(0)John Coleman, jun: 1
(2)Ebenezer Gardner: 3 1/2
(0)George Bunker: 1
(0)John Coffin: 1
(1)Jethro Coffin: 1
(1)James Gardner: 1
(2)Eleazer Folger: 2
(2)[Samuel Coffin: 2]
(4)William Worth: 4
(2)John Worth hath 2
(1)[Daniell Russell: 1]

(36) Totals 47

Other English HC purchasers documented in Table 3:

(4)Peter Coffin
(1)Jonathan Starbuck
(2)Joseph Nasson
(2)Wm. Gayer
(1)Stephen Pease
(1)Richard Swain
(5)John Gardner
(1)Nathaniel Folger
(1 1/2)Sylvanus Starbuck
(1)Nathaniel Paddack

(2 1/2)Zaccheus Macy
(1)John Macy
(2/3)Ruben Gardner
(1 1/2)Richard Coffin
(1/3)Benjamin Bunker
(1)Thomas Bunker
(1)Jonathan Bunker
(1)W. Worth, Jas Coffin, John Swain
(1/2) Samuel Starbuck
(2/3)Jonathan Burnell

(29 2/3) Total

Total number of English purchases documented in Table 3: 65 2/3.

REFERENCES CITED.

Adam, writer
1660 Deed in Which Nickanoose gave land to his daughter, Askamapoo, witnessed by four other Indians. Nantucket Historical Association Research Center, Manuscript Collection 126, folder 1.

Axtell, James
1981 The European and the Indian. Essays in the Ethnohistory of Colonial North America. Oxford University Press, London.

Barber, J. W.
1839. Historical Collections Related to the History and Antiquities of Massachusetts. Worcester.

Bidwell, P.W., and J. I. Falconer
1941 The History of Agriculture in the Northern United States, 1620-1860 [1925]. Peter Smith, New York.

Bragdon, Kathleen J.
1981 "Another Tongue Brought In:" An Ethnohistorical Study of Native Writings in Massachusett. Ph.D. Dissertation, Brown University. University Microfilms, Ann Arbor.

Brenner, Elise M.
1980 To Pray or to Be Prey: That Is the Question. Strategies for Cultural Autonomy of Massachusetts Praying Town Indians. Ethnohistory 27:135-152.
1984 Strategies for Autonomy: Ethnic Mobilization in Seventeenth Century Southern New England. Ph.D. Dissertation, University of Massachusetts, Amherst.

Byers, Edward
1987 The Nation of Nantucket: Society and Politics in an Early American Commercial Center, 1660-1820. Northeastern University Press, Boston.

Chase, Helen Winslow
1986 Jethro Coffin House Chronology, 1686-1986. Nantucket Historical Association, Nantucket.

Cook, S. F.
1976 The Indian Population of New England in the Seventeenth Century. Publications in Anthropology 12. University of California, Berkeley.

Cronon, William
1983 Changes in the Land: Indians, Colonists, and the Ecology of New England. Hill and Wang, New York.

DCD
Duke's County Deeds, Registry of Deeds, Edgartown MA.

Ewer, The Rev. F. C.
1869 "Historical Map of Nantucket." J. Ottmann, Lith., New York.

Freeman, The Reverend James
1807 Notes on Nantucket [1815]. Massachusetts Historical Society Collections. Series 2, 3:19-38.

Gookin, Daniel
1970 Historical Collections of the Indians in New England [1674]. Edited by J. H. Fiske. Towtaid.

Grumet, Robert S.
1980 Sunksquaws, Shamans, and Tradeswomen: Middle Atlantic Coastal Algonkian Women during the 17th and 18th Centuries. In Women and Colonization: Anthropological Perspectives. M. Etienne and E. Leacock, eds., pp. 43-62. Praeger Scientific, New York.

Hosmer, J. K., editor
1908 Winthrop's Journal [1630-1649]. Charles Scribner's Sons, New York.

Hough, F. B.
1856 Papers Relating to the Island of Nantucket...While Under the Colony of New York. Albany.

Jennings, Francis
1975 The Invasion of America; Indians, Colonialism, and the Cant of Conquest. The Norton Library, W. W. Norton, New York.

Little, Elizabeth A.
1976 Sachem Nickanoose of Nantucket and the Grass Contest. Historic Nantucket 23(4):14-22; 24(1):21-30.
1980a Probate Records of Nantucket Indians. Nantucket Algonquian Studies No. 2. Nantucket Historical Association, Nantucket.
1980b Three Kinds of Indian Land Deeds at Nantucket, Massachusetts. Papers of the Eleventh Algonquian Conference. William Cowan, ed., pp. 61-70. Carleton University, Ottawa.
1981a The Writings of Nantucket Indians. Nantucket Algonquian Studies No. 3. Nantucket Historical Association, Nantucket.
1981b The Indian Contribution to Along-Shore Whaling at Nantucket. Nantucket Algonquian Studies No.8. Nantucket Historical Association, Nantucket.
1981c Essay on Nantucket Timber. Nantucket Algonquian Studies No. 6. Nantucket Historical Association, Nantucket.
1982 Indian Politics on Nantucket. Papers of the Thirteenth Algonquian Conference. William Cowan, ed., pp. 285-297. Carleton University, Ottawa.

Little, Elizabeth A., and J. Clinton Andrews
1982 Drift Whales at Nantucket: The Gift of Moshup. Man in the Northeast 23:17-38.

Little, Elizabeth A., and Marie Sussek
1979 Nantucket Indians who Died of the Sickness. NantucketAlgonquian Studies No.1. Nantucket Historical Association.

Macy. Obed.
1835 The History of Nantucket. Hilliard, Gray, Boston.

Macy, Zaccheus
1792a A Short Journal of the first settling of the Island of Nantucket .... Nantucket Historical Association Research Center, Manuscript Collection 96, folder 44. Also in Massachusetts Historical Society Collections, Series 1, 3:155-160.
1792b Extracts of a letter from Zaccheus Macy to Peleg Coffin for the Historical Society of Massachusetts. Nantucket Historical Association Research Center, Manuscript Collection 129, Book IX, p. 126. Also in Macy (1835:262-271).

Mather, Cotton
1820 Magnalia Christi Americana [1702]. Hartford.

McCay, Bonnie M., and James M. Acheson
1987 The Question of the Commons: The Culture and Ecology of Communal Resources. University of Arizona Press, Tucson.

NCD
Nantucket County Deeds. Registry of Deeds, Nantucket MA 02554.

NPR
Nantucket Proprietors Records. Registry of Deeds, Nantucket MA 02554.

Nickerson, W. Sears
1958 The Old Sagamore: Mattaquason of Monomoyick. Bulletin of the Massachusetts Archaeological Society 19:53-66.

O'Callaghan, Edmund B., ed.
1855 Documents Relating to the Colonial History of the State of New York. Weed, Parsons, Albany.

Rawson, Grindal, and Samuel Danforth
1809 Account of an Indian Visitation [1698]. Massachusetts Historical Society Collections, Series 1, 10:132.

Salisbury, Neal
1982 Manitou and Providence: Indians, Europeans, and the Making of New England, 1500-1643. Oxford University Press, New York.

Salwen, Bert
1978 Indians of Southern New England and Long Island: Early Period. In Northeast. B. G. Trigger, ed., pp. 160-176. Vol. 15, Handbook of North American Indians. Washington: Smithsonian Institution.

Simmons, William S.
1986 Spirit of the New England Tribes: Indian History and Folklore, 1620-1984. University Press of New England, Hanover.

Simmons, William S., and George Aubin
1975 Narragansett Kinship. Man in the Northeast 9:21-31.

Starbuck, Alexander.
1924 The History of Nantucket. C. E. Goodspeed, Boston.

Starbuck, Nathaniel
1683-1744 Account Book Number 128. Manuscript Collection, Nantucket Historical Association Research Center, Nantucket.

Thomas, Peter A.
1979 In the Maelstrom of Change. The Indian Trade and Cultural Process in the Middle Connecticut River Valley: 1635-1665. Ph.D. Dissertation. University of Massachusetts, Amherst. University Microfilms, Ann Arbor.
1985 Cultural Change on the Southern New England Frontier, 1630-1665. In Cultures in Contact: The Impact of European Contacts on Native American Cultural Institutions, A.D. 1000-1800. W. W. Fitzhugh, ed., pp. 131-161. Smithsonian Institution Press, Washington DC.

Trigger, Bruce G.
1980 Archaeology and the Image of the American Indian. American Antiquity 45:662-676.

Winslow, Edward
1841 Good News from New England...[1624], Chapter 23. In Chronicles of the Pilgrim Fathers. A. Young, ed., pp. 354-367. Little, Brown, Boston.

Wood, William
1865 New England's Prospect [1634]. The Prince Society, Boston.

Worth, Henry Barnard
1904 Nantucket Lands and Landowners. Nantucket Historical Association, Bulltin 2:183-216.

Zube, E. H., and C. A. Carlozzi
1967 Selected Resources of the Island of Nantucket. Publication No. 4. Cooperative Extension Service, University of Massachusetts, with the U. S. Department of Agriculture.