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Manuscript on the History of the Blackfoot Indians in Contact with White Culture, 1933

by Clark Wissler, edited and completed by Alice B. Kehoe

The usual published study of a tribal culture is projected on the assumption that the culture as described is a highly standardized form of social behavior, which existed with little change over an indefinite period of time preceding white contact. It is doubtful if this assumption is warranted, since the form of culture as stated is based upon observed occurrences and the recollections of tribesmen living at the time the data were recorded. This is especially true of current studies in the culture of North American Indian tribes, most of these studies having been made during the interval 1890–1920. Assuming that the oldest native informants used in such studies were on the average seventy years of age, the culture as described could be established only for a period falling between 1860 and 1910. On the other hand, for some of the best-known Indian tribes, there are available historical publications giving fragmentary descriptions of culture at various intervals during the entire period of white contact. It may thus be possible to select an Indian tribe studied in detail during the period 1890–1920 and for which there are historical accounts ranging from 1600–1890. It is obvious that should this historical information be found reasonably complete, a comparison of these data with the standardized culture for the later period would indicate to some extent the stability of tribal culture during the whole period. Further, it is possible to accumulate data on such culture changes as may have occurred in the tribe in question, since the observations of ethnologists were published. Again, it is possible to examine the records of the Department of Indian Affairs for information as to cultural changes in progress at the time the ethnological studies mentioned above were in progress, thus giving us a more or less complete account of the cultural activities of the tribe selected throughout

the whole period of white contact. It is possible that the presentation of a tribal culture in such time perspective will give a truer picture of living culture than can be observed in ethnological studies of the usual type. Everyone now agrees that even so-called primitive cultures change in response to contacts with each other, as well as with white cultures, but as yet we have no body of data from which the forms and rates of change can be evaluated.

The group of tribes in the northern Plains generally known under the name Blackfoot offer a promising opportunity to try out the above suggestion. The published standardized culture is based upon observations and individual narratives recorded during the period 1890–1915. For the earlier period we have a fair amount of culture data scattered over the entire period from 1754–1890. The chief sources for these data are to be found in the writings of Umfreville, under the date of 1784; Henry in 1809; and Maximilian in 1833. These accounts give not only good descriptions of manners and customs, but, since they are in part in the form of diaries, they give daily pictures of Blackfoot culture as it was lived. Naturally, additional details of culture for this group are found in other writers of the period, a full list of which is given in the bibliography. [Editor's note: no bibliography was included with the 1933 manuscript; I endeavored to find and include Wissler's sources in the bibliography for this book.]

The first step in this investigation is to prepare a digest of the standardized culture, which in this case can be considered as functioning around 1880. The data used for the compilation of this statement can be taken from the published studies of Grinnell, McClintock, and Wissler.

The historical data available suggest that certain changes in this contact have occurred, according to which at least four periods of Blackfoot culture history may be assumed. These are: (1) 1670–1750: Period of indirect fur trade; (2) 1750–1850: Direct fur trade; (3) 1850–85: Treaty period; (4) 1885 to the present: The reservation period.

Period of Indirect Fur Trade

To fully understand the culture influences surrounding the Blackfoot during this period, an exhaustive review must be made of the ethnography of the time and the history of the fur trade. The Hudson's Bay Company began operations around 1670. French traders pressed in from the Great Lakes a few years later. Both had easy water routes to Lake Winnipeg and thus to the Saskatchewan River and the Plains. The northern end of the Plains area ends with the northern branch of the Saskatchewan, bounded on the west by the Rocky Mountains and on the east by Lake Winnipeg.

The Assiniboine tribes occupied the territory east of the lake and seemed to have formed the habit of visiting the Hudson's Bay posts via Nelson River early in 1680. This may have been due to a long standing acquaintance with the Cree, who were in direct contact with the Hudson's Bay Company. Further, the Assiniboine, from their own initiative and by direct encouragement, became traders carrying trade goods to the tribes west of them and in return transporting furs, etc., to Hudson's Bay. The history of this interesting procedure is probably lost, yet there may be additional interesting information in the archives of the Hudson's Bay Company. [Editor's note: See A. J. Ray, *Indians in the Fur Trade* (1974), drawn from these archives.]

At that time all of the territory between the Saskatchewan and the United States boundary was held by the Assiniboine and the Blackfoot groups. Therefore, it is certain that the Assiniboine traded with the Blackfoot during this period and thus were the carriers of some phases of white culture. To evaluate this influence is a fascinating problem, but can be best approached after the other periods in Blackfoot culture history have been investigated.

However, some white influence may have reached the Blackfoot from another direction. We have reason to believe that before 1670 the Blackfoot had absorbed the horse culture out of the Plains. In contrast to the Assiniboine of the time, who went mostly on foot and by canoe, the Blackfoot made no use of canoes and were provided with horses in sufficient number to transport their entire tribe personnel and belongings. We infer this because such was the status when first observed by French and English explorers in 1751 and again in 1754. Obviously, to have reached this state of saturation for horse culture, they must have begun to acquire it some decade or two before.¹

When observed in 1751 they possessed horse trappings and other arts of trade recognized by the French as Spanish in origin. Further, the Indians stated that these objects came by trade from the Southwest, in which direction were to be found trading posts kept by "white men with beards." There is no evidence to indicate that the Blackfoot came in direct contact with these Spanish or French traders, but that their contact was indirect by tribal trade through an intermediary.² According to traditions of the Blackfoot recorded later, this intermediary seems to have been Shoshone or, as stated later, the Snakes.³

The most important influence to bear upon the Blackfoot was the horse culture pattern already developed by the Snakes and other Plains tribes. As stated, this was fully assimilated before 1750 and may be considered one of the first major results of white contact (Fig. 1), though in this case the contact was indirect.



FIG. 1. Pikuni on horseback, 1855, by Gustavus Sohon.

No doubt, personal contact between white men and natives sets in motion culture change. It is possible that white men, or at least mixed-blood Indians, visited the Blackfoot before the historically recorded visit of 1751. There are mentions of such visits following that date, but there is no good reason for assuming that these were the initial instances. We know, for example, that Henry Kelsey from Hudson's Bay visited the Assiniboine of the Plains as early as 1690–91, spending more than a year in their camps. We know this because he was sufficiently educated to leave a journal. It is not impossible that he was preceded or immediately followed by adventurous white traders who left no written records.⁴ In 1751, the French seemed to have been on the north Saskatchewan in Blackfoot territory; in 1754, Henday mentions a French "leader" with Indians at Buffalo Lake, south of what is now Edmonton; Cocking, in 1772, mentions "a forlorn Frenchman who had been living with these Indians (Assiniboine) for seven years." However, we can take the date 1750 as definitely making the beginning of the period in which there was more or less constant direct contact between the Blackfoot and white traders.

When the Blackfoot first began to visit trading posts instead of dealing with the Assiniboine and other middlemen is uncertain. The early

accounts of the traders stress the fact that the Blackfoot would not leave the Plains, being unwilling to travel by foot or canoes. There is reason to believe that French trading houses were set up among the Assiniboine before 1740, some of which would be accessible to the Blackfoot. The first definite statement is by Henday in 1754, who, while on the South Saskatchewan states that the Piegan had come to the northeast to visit a trading post, presumably a French post in the vicinity of Fort La Corne [at the Forks of the Saskatchewan River in central Saskatchewan]. However, such visits would not have been frequent before 1750.

We may summarize the probable contact influence by stating that indirectly the Blackfoot had acquired horse culture and, in addition, knowledge of the existence of white men and familiarity with certain trade goods, especially metal tools, guns, kettles, trade tobacco, mirrors, beads, and a few other trinkets. There is no reason to believe that many of these objects were possessed by the Blackfoot before 1750, but that they were quite familiar with them and understood their value is reasonably certain. Horse culture must have raised the standard of living and increased the ease of supplying the camps with the furniture needed. Also, the use of the horse for transportation greatly lessened the drudgery of traveling, gathering wood, etc.⁵ Again, this superior means of transportation made possible a great increase in the size of tents, their furniture, and personal equipment. It may be assumed that the horse introduced a new type of property, since the early accounts of these people stress the fact that certain individuals possessed herds of horses. The possible effect of this increase in well-being and luxury upon other phases of culture, particularly social and ceremonial organization, is one of the interesting problems developed by this investigation.

Direct Fur Trade

This period is approximately a century long, dating from 1750 to 1850, and may be characterized as a period during which the Blackfoot group of tribes were not in contact with any governmental or commercial activities except those directly concerned with the fur trade. No settlements were set up near their traditional hunting ranges, nor do we find the respective governments of Canada and the United States sufficiently concerned with these tribes to make treaties with them until the end of the period. No missionaries were resident among them, nor had they made serious attempts to extend their activities to the Blackfoot country. In Montana some settlements for mining and grazing were set up late in the period, but these fell well without the territory claimed by these tribes. In short, they were free to live their own life so long as they remained within their

habitat, and no white control was in evidence except such indirect influence as the fur traders could exercise by threatening to withhold trade goods. On the other hand, it seems to have been the policy of the fur trade companies to discourage the intrusion of settlers, missionaries, etc., and further, to maintain the political independence of the tribes concerned. They rightly assumed that the preservation of such independence and the prevention of other types of white intrusion would be to the advantage of the fur trade. Our problem is then to discover in what way, if any, the new conditions of the fur trade changed the older Blackfoot culture. Also, in how far the fur traders were able to direct the social behavior of these tribes.

As preliminary to the consideration of this period, a general statement of the territorial range and relationships of the tribes is advisable. Referring to a map (Fig. 2) will make clear that the Blackfoot group resided in the northern Plains, around the headwaters of the Saskatchewan rivers, between the north branch and what is now the boundary line between the United States and Canada. It will be noted further that the Saskatchewan enters the Lake Winnipeg drainage and that in the main all the country between the Rocky Mountains and these lakes is grassland, whereas all the land immediately north of the north branch of the Saskatchewan is forest. This area was occupied by the Blackfoot group, the Assiniboine and the Plains Cree. Whether the Plains Cree were here before 1700 cannot be determined, but it seems likely that their movements westward of Winnipeg were stimulated by the fur trade. The early accounts indicate that while these tribes were more or less at war with each other, they were more often in friendly contact, since we note that the first white observers were able to find interpreters who could speak two or three of the languages belonging to these tribes. Further, as previously stated, the Cree and the Assiniboine carried on trade with the Blackfoot group.

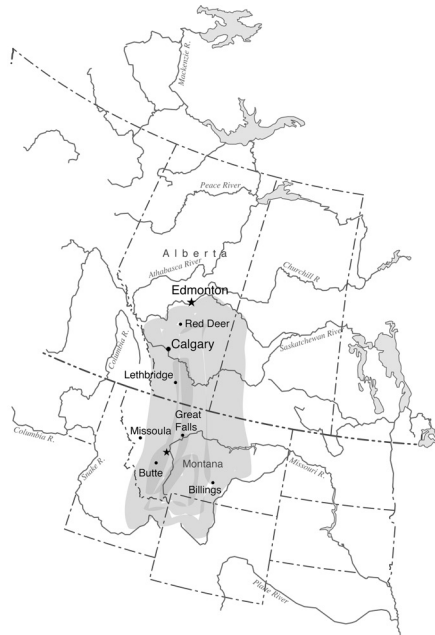


FIG. 2a. Original Blackfoot Territory, 1800.

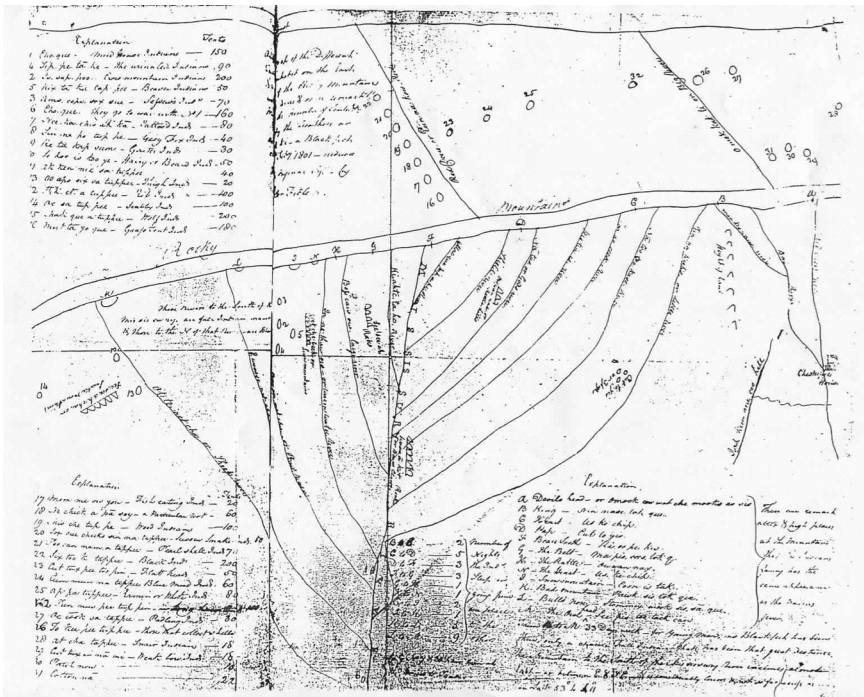
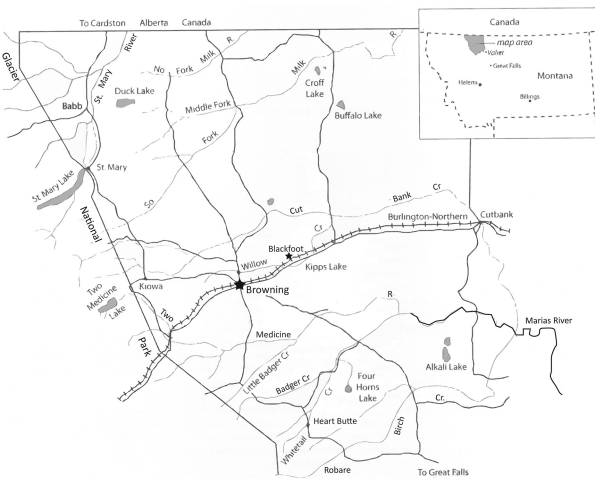


Fig. 2b (above). Map drawn by the Akai Mokti, principal chief of the Blackfoot alliance, for Hudson's Bay trader Peter Fidler in 1801. Annotated by Fidler as directed by the Akai Mokti, to show all the First Nations he knew, their territories, and the principal rivers and Rocky Mountains. The map shows the Snake-Columbia River route to the Pacific. North is to the right. See also map of Blackfoot territory, Fig. 2a shaded section. FIG. 2c (below). Blackfeet Reservation, Montana. Figs. 2a and 2c drawn by Marjan Eggermont.



Another important point is to consider the objective of the fur trader in this area. During this period the furs most desired for export to Europe were beaver, otter, and other fine furs, but of these beaver was the staple. Certainly it was the fur sought by the first traders in this region. The beaver is a forest animal⁶ but was fairly abundant in this part of the Plains, because even the small streams were skirted by thick growths of aspen, willow, mountain ash, etc., all excellent food material for beaver. Further, the north branch of the Saskatchewan afforded a continuous waterway either to Hudson's Bay or to Montreal. It also furnished easy access to the northern forests of Canada, a region rich in furs. It so happens that the tribes of the Blackfoot group were not disposed to trap beaver; in fact they seem to have had an aversion to killing this animal which in some cases amounted to a tabu. The Assiniboine, on the other hand, especially those bands living to the eastward in the timbered districts around the Winnipeg lakes, would trap beaver. These Assiniboine were encouraged by the traders to enter the Blackfoot country to trap beaver and so far as known the Blackfoot made no serious objection to the procedure.⁷ If, as assumed, the Plains Cree came to the area after the opening of the fur trade, they also were stimulated to enter the region to take beaver and trade with the other Indians. This may account for the tendency of the Plains Cree and Assiniboine to spread westward during the fur trade period and to some extent to filter into the range of the Blackfoot group. However, during all this time the Blackfoot group seems to have been the stronger, both in numbers and morale, which might account for the observed fact that the penetration of the Assiniboine and Cree was chiefly along the north branch.

We have noted that the Blackfoot were not disposed to trap beaver and the Assiniboine and Cree were willing to do so. However, we note in the reports of Henry and other traders that whenever the Cree and Assiniboine took to the open Plains they were disinclined to produce beaver especially if they were equipped with horses. In general this was the experience of traders in the United States, who found it necessary to introduce hunters into the Plains to trap beaver, since the typical Plains Indians were disinclined to engage in this work. We suspect that there is something incompatible between Plains horse culture and trapping beaver. Beaver trapping seems to call for a more or less fixed winter residence of scattered families. The pattern for Indian trapping in all the forest land east and north of the Plains was to scatter out in family groups over a wide range of territory. These groups were outfitted by the traders and soon came to be economically dependent on them. Furthermore, their trapping efficiency was increased by breaking down their old tribal solidarity rather than otherwise. We suspect, then, that the rapid breaking

down of the old Cree culture was largely due to this new form of living, which was in the main antagonistic to the old tribal organization. In other words, it tended to introduce family individualism as opposed to village and tribal communism.

In contrast, life upon the open Plains, following the horse culture type, was favorable to the maintenance of large well-organized tribal groups. Such a large body would be readily fed upon buffalo meat, provided it was sufficiently mobile to follow the herds. The earliest accounts state that these Plains Indians usually operated in camps of approximately two hundred tents. When the Cree and Assiniboine took to the Plains they seem to have adopted this mode of life, though less habituated to it than the Blackfoot. As we shall see later, the Blackfoot suffered less damage by white contact during this period than did their neighbors, which may be largely due to their resistance to the production of beaver.

If these Indians did not produce beaver, why did they offer an important field of activity for fur trade? They were industrious trappers of wolves and wolf skins were in some demand for export. The reason why the Blackfoot group produced wolf skins is not wholly clear, but it seems that before white contact the skin of the wolf was a necessary part of a warrior's equipment. Further, according to Umfreville, great numbers of wolves followed the Plains camps, living upon the rejected carcasses of the buffalo, and that they were easily taken by traps and by pursuit on horseback.⁸ However, one important part of Blackfoot trade was pemmican. The boat crews transporting furs and goods through the Saskatchewan country and westward depended largely upon pemmican for a traveling ration. Also, pemmican was sought as a reserve food for all trading posts. We note in reports of traders that this food formed a large part of the goods received from the Indians. Naturally, there was some demand for buffalo robes, deer skins, etc., all of which were occasionally turned in by the Plains Indians. In addition, horses were frequently sold to the traders. Thus, it is clear that even though these Indians did not produce beaver, they were able to offer goods sufficient for the trading posts within their country.

What the Indians desired in return for these goods was, first of all, firearms and ammunition. In addition, knives, hatchets, and kettles. Cloth did not appeal to them.

Since the traders entered this country by water, the important posts were to be found on the two branches of the Saskatchewan and their tributaries. The traders seldom went far inland. Trading posts in the United States were not opened on the Upper Missouri before 1820 and trade with the Blackfoot did not become active until the last decade of this fur trade period.

The Human Ecology of the Area

Ethnologists are usually content to describe the cultures of a tribe in an area, but rarely concern themselves with questions of population, environment, and health; but if one is concerning himself with the changes of culture over a given period, he can scarcely avoid giving serious consideration to such questions as the following: (1) the magnitude and stability of the tribal populations; (2) how the people are clothed and housed; (3) the state of health.

There are some difficulties in arriving at a satisfactory notion of the density of population in this area during the fur trade period. However, the traders found it advantageous to make careful estimates of the population in each tribe and subdivision in order to satisfactorily forecast the amount of trade goods to be provided. Further, with this information in hand each trader could know to what extent he was serving the whole tribe and what inroads his rivals had made upon his trade. As a rule, these early estimates are not based upon counts by individuals but on the number of tents. Assuming that the tribal organization was fairly constant during the period, it was safe to assume that each tent represented a reasonably stable social unit. Further, tents were objective and so could be readily counted, both by Indian and white. There is reason to believe that each chief or band leader knew the approximate number of tents in his party at any given time. However this may be, several writers of the period give the number of tents for each division of the Blackfoot and neighboring tribes.

The first, and perhaps the most reliable, statement is by Henry in 1809. This writer is remarkably accurate in all his observations subject to modern check, and so it may be taken for granted that his population counts are equally accurate. Since 1809 is approximately the middle point in the fur trade period, the estimate of Henry may be taken as typical for the period as a whole, provided it checks satisfactorily with the later estimates of other writers. To this end we have prepared a table showing the successive population counts for all the tribal divisions of the area.

It will be noted that Henry used two methods of counting, one, the number of tents, as just stated, the other, a count of warriors. According to his own statement, the term *warrior* means any able-bodied male capable of bearing arms. An examination of the table suggests that these two counts were made independently, since there is no definite mathematical relation between the number of tents and the number of warriors. Dr. Richardson, a member of the Franklin Expedition, states that according to his observations among the Gros Ventre the average number of persons per tent is ten. This may be somewhat too high an average, but if accepted

would give the three Blackfoot tribes a total population of 6,500 according to Henry's count, and approximately 10,500 according to Richardson. As we shall see later, these two estimates fairly well represent the population estimates between 1809 and 1850.

Under another head we shall note that the number of women among these tribes is greatly in excess of the men, the estimates suggesting a ratio of four to three. On the assumption that this is a conservative average, Richardson's estimate of ten persons to a tent may not be much too large, though, if Henry is correct in his count for warriors, we estimate at the ratio of four females to three males a total Blackfoot population of 7,000. However this may be, a study of the table leads to the conclusion that during the last half of the fur trade period, there was no significant change in the population of the Blackfoot and the neighboring tribes. This is an important matter since the opinion prevails that every contact between primitive and white peoples results in a marked decline in population for the former. Consequently, we have given careful and detailed consideration to all the available estimates. The best known general study for population of aboriginal America is by Mooney [Mooney 1928:13], who, it may be noted, credits the Blackfoot tribes with 15,000 about the year 1780. In areas where it has been possible to check Mooney's estimates they appear liberal, suggesting that a reduction of one-fifth might be nearer the truth. In any case, we feel that the data presented here do not warrant the assumption of such numbers as given by Mooney, but that the actual population for the period ranged between seven and ten thousand, with the chances favoring the smaller figure.⁹ It is true the literature contains some estimates higher than the figures of Mooney, but in no case does the person making the estimate indicate that it is any more than a guess, and the experience with the literature indicates that guesses as to tribal populations in the Plains are usually far in excess of the actual figures. However, it would be unwise to accept our estimate for the Blackfoot tribes without attempting additional checks.

Such a check may be found in the area occupied by these tribes. In 1809, Henry defined the territory occupied and claimed by the Blackfoot group, including the Sarsi and Gros Ventre, which boundary was consequently reasserted by these tribes in all subsequent treaties with Canada and the United States. The area enclosed by these boundaries is approximately 70,000 square miles. The population estimates for the Gros Ventre vary greatly, but a liberal interpretation would be 1,500, and for the Sarsi 1,000. Thus, the total population for the Blackfoot group would range from ten to thirteen thousand. This would give a population density of approximately 5.5 to 7 square miles per capita. This compares favorably with the population density for the whole Plains area

which, according to Mooney's relatively high estimate, is about 7 square miles per capita. Recalling that these tribes depended almost entirely upon buffalo flesh, the above seem to approach the saturation point. In 1833, Maximilian reports that traders on the Missouri established a necessary ration of one buffalo a day to twenty-five persons. Upon this basis the annual food supply per capita would require [fourteen] buffalo. Assuming the minimum population of 10,000 for the Blackfoot area, the total annual requirement would be [146,000, or 189,000 for a population of 13,000].¹⁰ It is difficult to estimate the number of buffalo the region could maintain, but in later years, when cattle raising became an important industry in the same region, two to four head a square mile was considered proper.¹¹ We note that to feed this population for one year each square mile in their habitat must produce a surplus of [two] buffalo. Denig [1930:462] estimates that one buffalo cow will produce seventeen head in eight years.¹² If this is correct, to maintain itself a herd of buffalo in this area must have exceeded the number killed annually by approximately [100,000?]; this would give a density in buffalo population of [3.5] per square mile. Too much weight should not be given these calculations, but they do show within wide range the limits the available food supply would place upon the Blackfoot population. While it is true that the Blackfoot hunted beyond the borders of their Plains territory, on the other hand, as we have seen, the neighboring tribes poached upon theirs, hence there is no reason to assume the above estimate to be invalidated by the failure of a tribe to observe its boundaries. Also, they were surrounded by other equally numerous tribes dependent upon the buffalo. Consequently, we offer the hypothesis that the suggested stability of tribal population in this area was chiefly due to environmental limitations.

Denig [1930:460-462] makes certain statements about the buffalo that bear upon this discussion. Because of his long experience and reliable observation on other subjects, his remarks should be given considerable weight. Thus, he states in 1854 that for the last 21 years the number of buffalo seems to have remained constant for the whole upper Missouri country. In fact, he believes that during his residence in that country the number increased rather than diminished.¹³ However, this opinion seems to be based upon his assumption that smallpox and other diseases had greatly reduced the native population. For example, he states that since 1780, fifteen to twenty thousand Indians died of this and other white man's diseases.

Denig [1930:462] estimates the total number of buffalo in the Plains area as approximately three million. We have previously referred to his calculations to show that if there were no losses to offspring the total

would soon rise to 51 million. This may be somewhat imaginative, but is offered here as the opinion of a competent observer.

Denig does not give actual estimates of the amount of buffalo meat consumed by the Indians, but comments at length as to the extraordinary capacity of an Indian, indicating that the amount of meat he may consume in a day exceeds belief. According to his observation, an Indian may eat continuously for ten hours. On the other hand, Denig states that these Indians resist starvation readily, being able to go many days without food [1930:509].

These statements are similar to those of other observers and might also apply to the Eskimo.

Catlin (1844:262–263) estimated the total Indian population of the Plains area at 300,000. The number of buffalo killed by the Indians annually for food is not stated, but he does say that in excess of 200,000 are killed for their skins, most of which are traded for liquor. Curiously enough, Catlin estimates that 1,500,000 wolves are also dependent upon the buffalo and take their toll from the herd. No doubt these estimates from Catlin are based upon statements of those engaged in the fur trade. [Editor: later in the manuscript, after his narrative text, Wissler copied this passage from the Report of the U. S. Commissioner for Indian Affairs for 1853, page 354, written from Ft. Pierre:]

I have taken no little pains to ascertain the supposed number of buffalo annually destroyed in this agency, and, from the best information, the number does not fall very far short of 400,000. Not less than 100,000 robes have been shipped by the two companies who are licensed to trade amongst the Indians under my charge. 150,000 are destroyed, of which a small portion of their flesh is consumed; they are killed for their hides, to make lodges, which they are compelled to make very secure to protect them from the extreme severity of the weather during the winter. Numbers of these lodges are disposed of to the traders for securing their peltries and robes, when traded, from exposure to inclement weather; numbers [of bison] freeze and starve to death in snow-banks, which for months are found in drifts from five to ten feet in depth, and numbers are drowned in crossing and re-crossing the Missouri river, owing to the large numbers in crossing crowding on each other. [RCIA for 1853:354]

We may now give some consideration to conditions and practices of the Blackfoot which may of themselves have tended to limit the population.

TABLE 1.1. The estimate per capita consumption of meat by Maximilian can be checked by data supplied by Henry (p. 444), who gives an itemized statement of the provisions consumed at his post during nine months 1807–1808. The consumers he states as comprising 17 men, 10 women, 14 children and 45 dogs. His statement of food consumed has been condensed as follows:

147 buffalo	63,600 lbs.
3 red deer	905 lbs.
5 bears	460 lbs.
Grease	410 lbs.
Pemmican,	140 lbs.
Total	65,515 lbs.

In addition his list includes:

4 beaver
 52 game birds
 1,925 fish
 325 bushes of potatoes
 Kitchen vegetables—a large quantity

If dogs were not included in this list, a fairly accurate per capita consumption could be calculated. Further, Henry states that a large part of the fish were given to visiting Indians. Further, unless he kept a separate account of other food given to visiting Indians, some allowance must be made for this item. However, since he does not indicate that any of the meat was given away, and if we assume that a dog will consume as much as a person, the daily per capita consumption would be 2 4/5 lbs. of meat.

Thompson (1797) says his Canadian companions consumed eight (8) pounds of fresh meat a day (p. 209). Again he says the daily allowance of fish is eight pounds, equal to five (5) pounds of meat (p. 112). Palliser [describes] Fort Edmonton [with a] “population of about 40 men, 30 women, and 80 children, almost entirely supported on buffalo meat, the hauling of which, for sometimes upwards of 250 miles across the plains, is the source of great and most fruitless expense. Indeed, the labour and the difficulty of providing for a consumption of 700 lbs. of buffalo meat daily, would frequently become very precarious, were it not for an abundant supply of fish from Lake St. Anne, about 50 miles to the west of the fort, whence they are capable of hauling 30,000 or 40,000 in a season; these are a fine wholesome white fish, averaging four pounds weight each” (Palliser:1859:41).

Henry speaks of this as starving. Maximilian estimated for Fort Mackenzie a daily ration of about 16 lb. per capita, no available supply of fish and vegetables indicated. If we assume that the dogs received none of the meat at Henry’s home post, the ration would have been about 5.9 lb. Doubtless, somewhere between these extremes would fall the average ration of the true plains Indian, suggesting that our estimate of the food consumption in the Blackfoot country is high enough to offer a safe margin.

According to Henry’s tables, the average weight of edible meat for buffalo cows is approximately 400 lbs. Upon this basis the meat allowance at Henry’s post was much less than the allowance at Fort Mackenzie, as recorded by Maximilian. This suggests that in our estimate of the normal food consumption of the Blackfoot we have understated the rate necessary to a desirable standard of living.

While it is true that the Blackfoot tribes and others in the area were in frequent contact with each other and every now and then camped in close proximity, nevertheless there was more or less friction between individuals, resulting in frequent murders and retaliations. Further, war parties organized privately were out constantly raiding the surviving tribes. Consequently, the loss of able-bodied men was considerable. Every now and then the entire party would be annihilated. Even among themselves, these tribes were far from peaceable, since the journals of traders reveal frequent cases of quarrelling, resulting in the death of one of the parties, usually followed by other deaths in revenge. One's impression is that these Indians were wild and but lightly disciplined, and that the prevailing pattern of behavior was to resort to violence at the least provocation. Murders were more common among men than among women which, in addition to the losses from war, made a heavy drain upon the male population.

Early observers agreed that drunkenness was responsible for many deaths and, while no accurate statistics are given, the impression of the reader is that in fatalities due to this cause, the sexes were about equal. Drinking was not confined to one sex, all participating freely in this celebration; intoxication resulting in quarrels and assaults on the part of both sexes. It may be that the traders have emphasized the evils of drinking because of the danger and trouble of such affairs. It must be remembered that it was only when the Indians visited a post for trade that liquor was distributed. Hence, it is not likely that a given group of Indians would have more than three or four drinks a year. Nevertheless, among a people where the death rate is high, even a slight increased mortality due to drinking would be an important factor in limiting the population.

It is also pertinent to consider the mode of life and the degree of exposure resulting therefrom. In the first place it is observable that the costume used by these tribes seems, from our point of view, wholly inadequate. The winters in this area are long and often severe, yet during the whole of the fur trade period the regular costume for the men was rarely more than moccasins, leggings, and buffalo robe. For example, Henry states:

The ordinary dress of these people is plain and simple, like that of all other Meadow [prairie] Indians; plain leather shoes, leather leggings reaching up to the hip, and a robe over all, constitutes their usual summer dress, though occasionally they wear an open leather shirt, which reaches down to the thigh. Their winter dress differs little from that of the summer; their shoes are then made of buffalo hide dressed in the hair, and sometimes a leather shirt and a strip of buffalo or wolf skin is tied around the head.

They never wear mittens. The young men have a more elegant dress which they put on occasionally, the shirt and leggings being trimmed with human hair always obtained from the head of an enemy. . . . The gun which they carry in their arms, and the powder-horn and shot-pouch slung on their backs, are necessary appendages to the full dress. The bow and quiver of arrows are also slung across the back at all times and seasons, except that, when the Indian is sleeping or setting his tent, these weapons are hung on a pole within reach. [Henry 1897:725–726]

Other observers make similar statements and ethnological studies for the latter period record traditional statements from Blackfoot informants wholly consistent with the above. The costume for women was equally simple, though possibly more adequate in that they wore a dress of skin reaching below the knees. It seems curious that a people in so cold a climate, within relatively short distance of northern forest tribes who used more adequate skin clothing, that the Blackfoot should not have adopted some of the conveniences such as caps, mittens, etc. It is true that some of the men of the period were said to have worn skin shirts and occasionally a fur cap, but it is curious to note that such caps and shirts seem for the most part to have been objects of regalia rather than belonging to everyday costume. The shirt, for example, was distinctly an article of dress for distinguished persons and more often something to be worn in battle, the decorations on which were expected to have magical and protective values. In other words, these shirts were worn not as clothing but as protective charms. More than once in the literature of the times we are told that young men, even in winter, would carry their shirts and other finery in a bundle, themselves wearing only robes, leggings, and moccasins.

It seems likely that such costumes, while undoubtedly ensuring a hardy race, would greatly increase mortality and thus be at least one of the factors in limiting this population. Another consideration in the well-being of a people is that of housing. In this respect there is little to consider because the skin tent of the Plains Indians was a satisfactory shelter at all times of the year. In fact, from a standpoint of health, it was superior to the present type of housing on many Indian reservations (see Plate 4). It is doubtful, therefore, if this can be set down as a limiting factor. Another important consideration is the food supply. This we have considered above, insofar as quantity was concerned. However, it is necessary to give attention to the food itself. For the most part, meat formed the entire diet, but since practically all parts of the animal were eaten, such as liver, brain, fat, etc., there is no reason why this diet should not have been adequate. On the other hand, some vegetable food was used, especially berries,¹⁴

eaten fresh, dried, and mixed with meat. Again, if hunting should fail for a few days, various edible wild plants might be utilized. So, granting that there was an adequate supply of food, there seems no reason why this population should not have been healthful and virile.

There remains to consider the state of health, frequency of disease, etc. Naturally there are no adequate statistics on this subject, since during the whole trade period no physicians were in the area. On the other hand, the traders were called upon in emergencies and so were in a position to take note of the state of health among the native population. However, their testimony agrees that the Indians were a healthy lot. On the other hand, we are told that colds and pulmonary disorders were not unknown, and since these were observed by the early visitors, it seems unlikely that all of them were introduced through white contact. However, there is no evidence for tuberculosis at this time, nor for severe epidemics, though occasionally a number of individuals would be observed to die from similar ailments. Naturally we assume that infant mortality was very high, since such is the case among all "primitive" peoples from whom we have adequate data, but there is no reason to believe that the death rate in infancy was any higher among these tribes than any others.

Dr. Richardson, of the Sir John Franklin Expedition (1819), observed goiter to be prevalent among the Sarsi. Strangely enough, he attributed this disorder to their water supply, which was from the river fed by melting snows in the Rocky Mountains. His chief reason for this was that none of the other tribes were troubled with this disorder except a few Indian women who resided at the Indian trading posts on the Upper North Saskatchewan, using water from the river. However this may be, the prevalence of goiter among this tribe was reported from time to time until about 1870.

It is generally assumed that the first contact with Europeans introduces new and fatal diseases to the native population. The Indians of this area did not escape such diseases, probably the most disastrous of which was smallpox; since this disease was prevalent in Europe, it was inevitable that it should reach even the Indians of this isolated area. So far as known, its first appearance here was about 1780, though it had previously ravaged the Indian tribes of the Mississippi valley. Anyway, in 1781 and 1782 this scourge raged over the northern Plains reducing all tribes, in some cases more than 50 percent. That it reached the Blackfoot we know, but have no definite information as to their losses. According to Umfreville, the Gros Ventre suffered severely. Henry states that there was a second outbreak about 1790 which greatly reduced the Piegan, so that they now numbered but 150 tents. The same writer states that smallpox attacked the Gros Ventre again in 1795. It is certain that from this time on

there were more or less periodical scourges of this disease, and we have compiled a table from the available sources giving the dates when this disease was reported as serious among the Blackfoot and their immediate neighbors. However, it is difficult to estimate the actual losses. If the deaths had been as frequent as some writers indicate, it is difficult to account for the number reported as surviving. On the other hand, Henry and other observers frequently remark on the rapidity with which these tribes recuperated their losses. It seems probable that both statements are in part true, namely, that the losses from smallpox were not as great as reported, and secondly, that these tribes were able to increase in numbers when the food supply and other conditions were favorable.

The traditions of these tribes suggest that early in their experience with smallpox they developed a technique for checking the ravages of the disease, for, as soon as the disease appeared, the practice was to scatter widely in small camps. This is probably why we find it stated in the literature of the times that the Indians of the Plains, particularly those of the northern Plains, suffered less than others. Hence, it is probable that, though the introduction of smallpox threatened the continued existence of these tribes, they soon adjusted themselves to the situation, to the end that it was no more fatal to the increasing of their population than to the European. Since settlements did not encroach upon the Blackfoot until after 1850, they were not especially troubled by the usual run of children's diseases common among Europeans. Certain it is that after 1850 we have frequent reports indicating that measles, whooping cough, etc. appeared at intervals, and in some cases with disastrous results. Yet on the whole, except for the introduction of smallpox, the fur trade period seems to have been marked by a condition of good health, the indications being that the mode of living followed by the Blackfoot of this period was sufficiently well adjusted to the environments to enable the population to maintain itself and to increase in numbers to the natural limits of the culture pattern. We have previously attempted to answer the question why the Blackfoot population did not increase rapidly and enter upon an era of expansion after the introduction of the horse and the beginning of the fur trade. We suspect the answer lies in the adjustment of their mode of life to the particular geographical and ethnical setting in which they found themselves. All of the factors noted above took their toll in deaths, but since these natives seemed able to recuperate their losses from smallpox, we suspect that the factors limiting the population are a part of the total environmental and cultural complex.

When considering the loss of adult males in this population we noted that the chances of life were greater for females. Hence, the question may be raised as to the relative number of the sexes in this population and the

TABLE 1.2. Smallpox

Jeness cites *Four Centuries of Medical History in Canada*, vol. 1, J. J. Heagerty [Toronto, 1928], pp. 251–252, [that] Smallpox appeared on the Atlantic in 1635. 1738, had reached west of Winnipeg.

1691—Mooney [1928:12]—In Texas, etc. 3000 Caddo die.

1778—Mooney—“ “ “ “

1781—Umfreville—Struck Fall Indians [Gros Ventres]. First great attack.
Not so bad in the Plains.

1782—Bryce—Swept Assiniboine and down the Missouri.

Mooney [1928:12]—cut fur trade for two years.

1790 approx.—Henry [1897:722]—Piegan reduced to 150 tents.

1795—Henry [1897:531]—among the Fall Indians [Gros Ventres].

Approximate date.

1801—Mooney [1928:12]—Over all the Plains area in the United States.

1836—Hale—Heavy loss—reduced to 1,500 tents (?) Blackfoot, Gros Ventre, and Sarsi

1837–38—H.B. [Hudson’s Bay Co.]—Blackfoot losses.

1842–43—Grinnell—Blackfoot.

1845—Grinnell—Blackfoot.

1857–58—Grinnell—Blackfoot.

1861—Not suffered much from smallpox—(H. and V.)

1869—Outbreak followed military defeat.

1870—Severe outbreak—1,400 deaths.

Perhaps the best account of the smallpox scourge is by Thompson who was in the country a few years later. Near Eagle Hills on the North Saskatchewan in 1786 he saw a camp full of sick and dying Indians. Apparently this was another outbreak.¹ The great scourge began in 1780 among the Chippeway [Ojibwe (Anishinaabeg)] and the Sioux and thence spread rapidly westward and northward over the whole interior of Canada. More than one-half of the natives are said to have died. The traders collected furs from the tents and cabins of the dead as well as from the sick. The Piegan claimed to have the first smallpox from a camp of Snake Indians they raided. It is further claimed that there was a shortage of deer and bison the following year and that the number never reached the former level (Thompson 1916:320–325). In-how-far these statements are accurate we cannot determine, but Thompson was a careful observer.

1. Editor’s note: Wissler misread Thompson here (Thompson 1916:320–323), and apparently did not see Tyrell’s footnote correction on the date (320, note 3). Thompson was quoting Mitchell Oman, another trader, although he fails to indicate where Oman’s story ends. Tyrell, editor of the 1916 publication of Thompson’s Narrative, said in a footnote that the year must have been 1781, not 1786.

bearing of this upon the ability of the tribe to recuperate. As stated, the observed ratio was in excess of four females to three males. As expected, these tribes were not strictly monogamous, plural marriages being the rule for chiefs and prominent men. However, the female population of all tribes in this area was constantly augmented by captives, since in raids and war excursions the rule was to kill all males of arms-bearing age, but to take captive all young women and female children. All traders visiting this area were struck by the number of young captives in every camp. It is obvious that in this way the excess of females would be augmented, which would supplement the excess due to the greater hazards incurred by males in hunting and in war. Here may lie the secret of the apparent elasticity in this population, by which it could recuperate heavy losses from disease or war. It is interesting to note that this excess of females declines gradually after 1850, but even in the census of 1910 the full blood statistics for the Piegan reservation in the United States shows 640 females to 573 males. Whether this long persistence in the excess of females is due to the same causes operating in the fur trade period is a question we are unable to answer. However, it is clear from the data that there has been a steady decline in the excess ratio since 1850.

TABLE 1.3. Health

1750–1850—Health reported good
Trained to endure hardships.
1809—Some venereal disease reported—colds and cough.
1819—Goitre; 1861; peculiar to Sarsi.
Smallpox; 1782, 1790–5, 1836; temporary losses only.
Prosperity might have brought great increase, if not checked by smallpox.
1850–1885—H. and V. (1861) healthy, not suffered much from smallpox.
1870—Smallpox severe.
Eye disorders common.
Unusual diseases of children rare; but measles in 1864. (Smith)
Some tubercular reported (1879).
1883–4—Grinnell, 1/4 the population starve. (600)
1885—Children's diseases appear—measles, etc.
Bronchial ills.

Standard of Living

An important question at this point is as to whether the Blackfoot standard of living was in any way changed by the fur trade. In the first place, the earlier introduction of the horse must have affected the standard of