



Volume 4

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2018

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### Recommended Citation

Reinhiller, Jayne (2018) "Holding on to Culture: The Effects of the 1837 Smallpox Epidemic on Mandan and Hidatsa," *Butler Journal of Undergraduate Research*: Vol. 4 , Article 12.

Retrieved from: <https://digitalcommons.butler.edu/bjur/vol4/iss1/12>

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## **HOLDING ON TO CULTURE: THE EFFECTS OF THE 1837 SMALLPOX EPIDEMIC ON MANDAN AND HIDATSA**

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When I was a young girl growing up in North Dakota, history surrounded me. I walked ditches and craters left in Mandan and Hidatsa villages that once boasted hundreds of members. Now, their former glory is preserved only in the journals of trappers and explorers and in family legends.

How could the most influential trading civilizations of the Northern Plains disappear in a matter of decades? This question sparked my exploration of the Mandan and Hidatsa cultures and how they changed during the 1837 smallpox epidemic. Before this time, American and European fur traders built economic connections with the settled tribes to acquire beaver pelts and other hides for the European fashion industry. However, these traders brought more than trade goods; they brought smallpox. The Mandan and Hidatsa had little natural immunity to European diseases, and in the winter of 1837, two-thirds of the Hidatsa and 98% of the Mandan died in a smallpox epidemic. This tribal decimation altered both social and ceremonial structures, resulting in both a new cultural identity and ceremonial structure.

### **The Settled Nations**

The Mandan and Hidatsa were among the first tribes in present-day North Dakota. The earliest Mandan settlements along the Missouri River and its tributaries date between 1100 and 1400 AD. The Hidatsa (comprised of the Hidatsa Proper, Awaxawi, and Awatixa) arrived in North Dakota between 1400 and 1600 AD, and as shown in figure 1.1<sup>1</sup>, settled along the Heart, Knife, and Little Missouri Rivers.<sup>2</sup> Unlike the nomadic tribes of the Great Plains, the Mandan and Hidatsa built permanent villages on the high banks of the Missouri River and its tributaries. All sides of these villages were protected from attack. One side dropped to the river; the other three sides were enclosed within wooden palisades. Beyond the palisade were ditches three to four feet deep.<sup>3</sup> These unique village structures protected the villages from raids by hostile tribes and created stable trade centers whose influences spanned the continent.



would remove his belongings from the lodge; after this, he could not return to the lodge or be part of its society.

These lodge relationships had implications beyond family structure.<sup>7</sup> Both the Mandan and Hidatsa were divided into clans based on genealogy. Every clan had a male clan leader, but was matrilineal in nature; that is, children belonged to their mother's clan, and clan was involved in every aspect of a tribal member's life. The clans trained children to be productive members of the tribe and chastised unconstructive behavior, while also encouraging children's participation in ceremonial dances and fasting. If a clan member was killed, the clan avenged his death. The clan cared for their elders, and prepared the dead for burial. From their first to last breath, a Mandan or Hidatsa's clan was present to assist them through life's journey.<sup>8</sup>

### Age Grade Societies

One of the clan's most vital tasks came as their children prepared to enter the ceremonial age grade systems present in both Mandan and Hidatsa society. The age grade system involved a series of organizations that promoted tribal participation and responsibility. A person's clan determined which societies the individual joined, and the clan helped supply goods to pay the society's entry fees. Although the age grade system was present in both the Mandan and Hidatsa prior to the 1837 smallpox epidemic, the specific societies were unique to each tribe.<sup>9</sup>

For instance, the Mandan age grade system began when individuals turned eight or nine. At this age, boys fasted for short periods during important ceremonies and selected an older man to be their clan father (a mentor in spiritual and tribal matters). Every year, their fasting times increased, until the boy turned seventeen or eighteen and fasting lasted for long periods; the boy then also began ritual bloodletting. At this time, the boy became a man and would join the first society of his clan, taking on more responsibility in the tribe.<sup>10</sup>

Once the man married, took part in war parties and hunts, and showed great bravery, he entered the Black Mouth Society. This society acted as the village police force and relayed decisions from the tribal leaders. Its members also organized the village when it came under attack. Married women, on the other hand, joined the Goose Society. The Goose Society's ceremonies revolved around crops and harvest.

From these middle-age societies, Mandan men and women transitioned into societies for elders. Men joined the Bull Society, and women joined the White Buffalo Cow Society. Both societies took part in calling the buffalo before hunts.<sup>11</sup>

The Hidatsa had their own age grade societies, although the progression followed the same pattern as the Mandan system. First, boys between the ages of eight to ten years and girls ages 12 to 13 joined primary societies to learn about tribal life, fasting, and ceremonies. Once married, men and women moved to young adult societies. Men joined the Half-Shaved Head Society, which taught men to defend the village and lead war parties. Women, depending on their clan, joined the River or Enemy Societies. Both societies danced when the men came back from war and took part in celebratory rituals.<sup>12</sup>

From these young adult societies, men and women progressed to middle-aged and elder societies. Like the Mandan, the next society for Hidatsa men was the Black Mouth Society, while women entered the Goose Society and danced for rain. Before men reached the elders' society, the Hidatsa had one more step, the Dog Societies. Members of these societies were proven warriors and walked without moccasins in honor of the dogs in their sacred legends. Finally, Hidatsa men and women entered the Bull and White Buffalo Cow Societies. The Bull Society danced four times a year to call the buffalo.<sup>13</sup>

### The Okipa

American and European visitors to the Mandan and Hidatsa villages provided vivid descriptions of the buffalo calling ceremonies. In just one instance, Philippe Regis de Torbirand, a United States Army officer stationed in the Dakota Territory, recorded his reaction to the Mandan dances. Torbirand did not understand the legends or traditions behind the dances; instead, he saw the intricate regalia and movement. To him, the songs were only "barbarous chants...howling...[and] shrieking."<sup>14</sup> Similarly, for F.A. Chardon, the bull dances at Fort Clark were annoyances and little more than begging, as Chardon did not understand the ceremony or the significance of paying for ceremonial knowledge in Mandan society.<sup>15</sup> In the eyes of the tribes, however, these dances were essential to survival.

Before a buffalo hunt, the Bull Society performed a buffalo calling ceremony. The society members and other, selected young men donned buffalo robes and reenacted a buffalo hunt. Whenever a man grew too tired to dance, his fellow dancers shot him with blunt arrows. Then, as shown in figure 1.2<sup>16</sup>, the man fell to his knees like a dying buffalo bull, and the spectators dragged him from the

dance and “skinned him” by removing his robe.<sup>17</sup> After the day’s dances concluded, the men entered the village’s ceremonial lodge. There the old men sat in a circle and smoked the ceremonial pipe while young men brought their wives to the elders to “walk the buffalo.” The tribes believed that, if a woman had sexual intercourse with the elder men (the personifications of the buffalo), she would be able to transfer the buffalo’s power to her husband.<sup>18</sup>

The Corps of Discovery, the exploratory expedition sent by President Jefferson to find the source of the Missouri River (which included William Clark), experienced this ceremony at Fort Mandan. When the expedition visited the Mandan villages, they joined the Bulls in the lodge. Young men presented their wives to the Americans to obtain some of their power. Although they did not fully understand the meaning of “walking the buffalo,” many of the men were eager to participate.<sup>19</sup>

For the Mandan, the summer buffalo calling ceremony coincided with their most sacred ceremony, the Okipa. Mandan villages were designed around this ceremony. The center of a Mandan village was a 150-foot dancing ground with a cedar enclosure at its center called the Ark of the Lone Man. To the north of this dancing ground was the Okipa lodge. This village construction dated back to the earliest villages along the Heart and Grand Rivers, which were founded in the 1500s. The Okipa ceremony told the Mandan creation story and the history of the tribe. Many men participated in this ceremony, fulfilling the roles depicted in the legends. There was the Lone Man (the Mandan creator), the Foolish One (the trickster), the giver of ceremony, singers, drummers, the bull dancers, and fasters.<sup>20</sup>

Okipa ceremonies lasted four days and followed a complex series of stories, reenactments, dances, fasting, and bloodletting. Lone Man entered the village and described his creation of the world in the ancient Mandan language and fought Foolish One.<sup>21</sup> Then the Bull Society preformed their buffalo dance.<sup>22</sup> Young men participated in ritualistic piercing of the skin with wooden skewers. These skewers were fastened to ropes and the men were suspended from the central poles of the Okipa lodge. The men reportedly hung in the lodge until they lost consciousness.<sup>23</sup>

The Okipa ceremony formed the core of Mandan historical and ceremonial culture,<sup>24</sup> but this tangible connection to spiritual and historical culture extended beyond elaborate ceremonies. The Mandan and Hidatsa believed the supernatural was in all aspects of life, and actively sought spiritual guidance.<sup>25</sup> This guidance came during times of fasting and bloodletting both in ceremonies like the Okipa and on solitary vision quests. According to Calf Woman, a Mandan interviewed by Alfred Bowers during his anthropological research, “People don’t get visions every

time they fast and don't expect to. Even though the gods send no instructions, they show appreciation by sending good luck."<sup>26</sup>

When visions came, however, the animals or spirits in the vision became the faster's personal god and gave him instructions to create a sacred bundle.<sup>27</sup> Outside observers like George Catlin called these bundles "medicine bags." "Medicine" referred to anything supernatural or mysterious, but Catlin never fully grasped the full significance of the bundles.<sup>28</sup>

According to the Mandan and Hidatsa interviewed by Alfred Bowers during his anthropological studies, bundles were essential to Mandan and Hidatsa culture. They were divided into two categories: tribal bundles like the Okipa and Old-Woman-Who-Never-Dies bundles that held the instructions for the Mandan and Hidatsa's sacred ceremonies, and personal



**Figure 1.2.** *Bison-Dance of the Mandan Indians in Front of Their Medicine Lodge in the Mih-Tutta-Hangkus* (Karl Bodmer) Source: North Dakota State Historical Society Archives

bundles that were made in honor of personal spirits.<sup>29</sup> Regardless of whether they were tribal or personal in nature, each bundle had several common attributes, such as: items representing a myth or vision; instructions and rites for acting out the myth; and specific songs to be performed in the ceremony. Individuals acquired bundles through payment and preserved the bundle by hosting feasts. Only the owner of the bundle knew the significance of its contents and could perform the ceremonies, and it was common for bundles to remain within a clan or family line unless there were no heirs to inherit the bundle.<sup>30</sup> These factors make analyzing individual bundles difficult. Without owning the bundle, a person did not know the details of its story or the significance of the contents. Personal bundles are especially difficult to analyze because they often died with their owners, as few if any understood the vision that had inspired the bundle.

Although they are difficult to study, bundles formed the center for personal worship and provided instructions for elaborate ceremonies in the Mandan and Hidatsa cultures.<sup>31</sup>

### **Economic Prosperity and Vulnerability**

In addition to their religion, the Mandan and Hidatsa were defined by their economy. John MacDonell called the tribes the “best husbandmen in the whole New World” because they managed their crops so they not only provided for their villages but also had more than enough to trade.<sup>32</sup> Because of their position along the Missouri River, Mandan and Hidatsa villages became trade centers with influence that spanned the continent. Before Europeans came to the Missouri River, the tribes traded with the many tribes of the Great Plains. After European settlement, in 1738, Pierre Gaultier de Varennes visited the Mandan and established trade relations between the tribes and French-Canadian fur traders.<sup>33</sup>

Originally, individual traders living among the Mandan and Hidatsa exchanged manufactured goods for native crafts and furs.<sup>34</sup> When the European market created a high demand for beaver pelts, however, this system changed rapidly. By the 1790s, the North West and Hudson Bay companies were sending expeditions to the Missouri.<sup>35</sup> Although these trade relations were essential to the fur trade’s success, the European traders abused their Mandan and Hidatsa partners, such as the deal described in Philippe Regis de Trobriand’s journal between the Mandan and Hidatsa and his fort. In exchange for the fresh meat and furs brought by the tribe, Trobriand gave moldy crackers and spoiled salt pork that the fort had condemned shortly after receiving the supplies.<sup>36</sup>



Unfortunately, spoiled supplies were not the only dangerous trades between the village tribes and the fur traders.

### Epidemic

The fur traders brought more than guns and manufactured goods; they brought disease. Thus, from the beginning of the fur trade, epidemics ravaged the native populations. The most deadly of these was smallpox.

Smallpox, a highly contagious disease characterized by fever, aches, chills, and the characteristic “pox,” was transmitted through contact with infected people, contaminated objects, and infected corpses.<sup>37</sup> The Mandan and Hidatsa were extremely vulnerable to smallpox. The prevailing theory holds that their ancestors migrated from Asia during the ice ages and came from cold climates with few diseases. As a result, they did not have the same level of immunity as the European traders.<sup>38</sup> In addition to their genetic risk, Mandan and Hidatsa earth lodges were built close together, with up to forty people living in each lodge. These tight quarters made quarantine nearly impossible and fostered the spread of smallpox.<sup>39</sup>

The deadliest smallpox outbreak in the tribes’ histories began in July 1837.

As with many tragedies, conspiracy theories developed to explain the 1837 outbreak, with claims that smallpox was deliberately introduced to the Native Americans through infected blankets in an attempt to decrease native populations.<sup>40</sup> Although captivating, the historical record does not support this claim. F.A. Chardon, a trader who lived at Fort Clark, kept a detailed journal throughout the epidemic and detailed the disease’s progression.

In June 1837, the steamboat *St. Peters* arrived at Fort Clark. Everything was normal, but there had been several cases of smallpox aboard the boat since it left St. Louis.<sup>41</sup> Within weeks, on July 14, 1837, the first smallpox death occurred; by then, many others were infected. For the next year, each day Chardon recorded smallpox deaths. This disease struck both young and old, outsider and chief. Just when it looked like a village had escaped, the pox regained strength and claimed more lives. Chardon was helpless. He administered doses of Epsom salt, a supposed treatment, to anyone he could, but the remedy had little impact; the deaths continued to mount to the point that Chardon could no longer record the names or numbers of the dead.

Among the dead were Chardon’s Sioux wife and many of his friends and trading partners. Before long, the death toll overwhelmed the living, and bodies

were left in their earth lodges or on the outskirts of the village because there were not enough healthy people to preform burial rites.<sup>42</sup>

Chardon records three distinct reactions in the face of almost certain death. Some clung to their fractured sense of normality and turned to the spirit world for guidance. The tribes preformed their ceremonies and dances in the face of death. These men and women realized they did not have long to live, so they turned to their religion for comfort. For others, their grief turned to anger.<sup>43</sup> Chardon records, “They swore vengeance against all the whites, as they say the smallpox was brought by the [steamboat].”<sup>44</sup> These individuals understood the origins of the epidemic, and acted on their anger. Over the course of the smallpox year, Chardon records numerous assassination attempts. Finally, some Mandan and Hidatsa, overcome by grief and fear, committed suicide to escape the disease, a phenomena almost unheard of before 1837. On August 31, 1837, Chardon recorded one woman’s tale: “A young Mandan that died 4 days ago, his wife having the disease also, killed her two children, one a fine Boy of eight years and the other six, to complete the affair she hung herself.”<sup>45</sup> There was no escape from the disease, except for death.

When the smallpox epidemic subsided, the Mandan and Hidatsa were decimated. The epidemic killed 33% of Hidatsa and 98% of the Mandan.<sup>46</sup> In the Mandan village at Fort Clark, only 14 of the original 600 villagers survived. Mandan were too few to remain independent or defend themselves against attack.<sup>47</sup> To preserve their culture and remaining members, the Mandan and Hidatsa took drastic measures.

### **Adaptation and Resilience**

Because of the population loss, the villages were indefensible. Some Mandan and Hidatsa moved to Crow villages, while others built a new village, called Like-A-Fishhook, at the mouth of the Knife River and created a new, composite culture.

In the new village, the tribes created a governing council comprised of chiefs from every tribe and band.<sup>48</sup> Like-A-Fishhook’s design was a composite of Mandan and Hidatsa traditional construction and the building styles of the American settlers. The village had a central dancing ground and Okipa lodge like a Mandan village,<sup>49</sup> yet traditional lodge construction decreased. By the 1860s, as figure 1.3<sup>50</sup> shows, log cabins replaced earth lodges as the primary dwellings at Like-A-Fishhook.<sup>51</sup>

Although the earth lodge construction was lost after 1837, families at Like-A-Fishhook continued the communal family structure. Men joined their wives’

households and children joined their mother's clan.<sup>52</sup> However the clan system was irrevocably altered by the epidemic.

The Mandan's thirteen clans were reduced to four. Hidatsa clans faced similar extinction.<sup>53</sup>

Although the clans were diminished, their importance increased after the smallpox. Many children were orphaned during the epidemic, but members of their parents' clans adopted them.<sup>54</sup> This was essential for cultural preservation. Mandan and Hidatsa culture was conveyed via oral tradition embedded in the clan system, so children without clans missed valuable portions of their culture. By adopting these children into the clan, surviving members insured their culture and traditions would continue through future generations.

Although much of the tribes' cultures were lost to the smallpox, Mandan and Hidatsa spiritual life was perhaps hardest hit by the 1837 epidemic. Some age grade societies like the Raven, Black-Tail Deer, Old Wolf, and Half-Shaved Head societies disappeared during the smallpox because there was no one alive who remembered the ceremonies and rituals. However, some societies persevered through adaptation and cultural diversity. Men from both the Mandan and Hidatsa purchased other societies. For example, the Kit Fox Society was exclusively Mandan, but only one man, Bears-Look-Out, survived the smallpox. He sold the society's rites to a group of Awaxawi Hidatsa to preserve the society when there were no remaining members, and thus the society continued in the Hidatsa families until the early 1900s. A few societies, for instance the Wolf Society, even grew in numbers after the smallpox. These societies were associated with well-known myths and had no private ceremonies, so they could be performed easily.<sup>55</sup> Thus, although the age grade system, which was at the heart of Mandan and Hidatsa spiritual life, faced near extinction after the 1837 smallpox epidemic, through adaptation it persevered in a fractured state for nearly a century.

With the combined tribes at Like-A-Fishhook, the Mandan and Hidatsa ceremonies continued post-smallpox. However, like the age grade system, these ceremonies experienced significant alterations. Ceremonies continued their pivotal role in Mandan and Hidatsa culture but opened to multicultural participation. The Okipa is a prime example of this cultural change.



**Figure 1.3.** *The Real Site of Fish Hook Village* (Martin BearsArm) Source: North Dakota State Historical Society

The Mandan Okipa replaced the Hidatsa buffalo ceremonies and became sacred to both tribes. At Like-A-Fishhook, there were as many Okipa fasters from the Hidatsa as there were Mandan. To accommodate both cultures, Okipa rituals took place outside and diminished in severity.

However, this ceremony would not endure long. The last true Okipa ceremony was held in the 1870s.<sup>56</sup>

### What was Lost?

Unfortunately, not every ceremony survived the smallpox. On many occasions, smaller ceremonies died with their owners. One such ceremony was the Corn Pipe

ceremony that brought favorable winds for the gardens and drove away mosquitos. Although people in Bower's study said their parents remembered the ceremony being performed, the details faded from memory. When the legends and practices were not transmitted to the next generation, vital aspects of Mandan and Hidatsa culture disappeared.<sup>57</sup>

The fragility of oral tradition was especially evident with the sacred bundles. Many bundles, including all but one chief bundle, were lost during the 1837 smallpox epidemic. Those bundles that did survive were passed between the Mandan and Hidatsa. When Alfred Bowers conducted his studies among the Mandan and Hidatsa in 1910, there were only seven bundle owners among the Mandan. When Bowers inquired about the ceremonies surrounding these bundles, the owners said they still held feasts for the bundles, not out of personal devotion, but out of respect for the elders who remembered the ceremonies from the old days. Nevertheless, the practice of keeping bundles was almost completely lost in the smallpox and would fade away before the 1950s.<sup>58</sup>

### Conclusion

The Mandan and Hidatsa inhabited the land along the Missouri River for hundreds of years. They developed intricate cultures based on family structures, oral traditions, ceremonial rites, and trade. Because of the Mandan and Hidatsa religions' secret nature and the system of purchasing bundles, societies, and ceremonies, these cultures were vulnerable when there was no one to pass on the traditions. During the 1837 smallpox epidemic, both tribes lost large portions of their population, and the Mandan were almost eradicated. The loss of life altered every aspect of their culture. The clan and age grade systems were diminished. Ceremonies were combined and many spirit bundles were lost. Incredibly, despite this hardship, the Mandan and Hidatsa maintained aspects of their culture which lasted into the twentieth century.

## Endnotes

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<sup>2</sup> Virginia Bergman Peters, *Women of the Earth Lodge: Tribal Life on the Plains* (Norman, Oklahoma: University of Oklahoma Press, 1995), 19–21.

<sup>3</sup> Peters, *Women of the Earth Lodge: Tribal Life on the Plains*, 7; George Catlin, *Letters and Notes on the Manners, Customs, and Conditions of North American Indians*, vol. 1 (New York: Dover Publications Inc., 1973), 81; Paul Thacker, “It Takes a Fortified Village,” *Archaeology* 56, no. 1 (February 2003): 12.

<sup>4</sup> Alfred W. Bowers, *Hidatsa Social & Ceremonial Organization* (Lincoln, Nebraska: University of Nebraska Press, 1992), 11–13.

<sup>5</sup> Peters, *Women of the Earth Lodge: Tribal Life on the Plains*, 8.

<sup>6</sup> Catlin, *Letters and Notes on the Manners, Customs, and Conditions of North American Indians*, 1:82–83.

<sup>7</sup> Alfred W. Bowers, *Mandan Social and Ceremonial Organization* (Lincoln, Nebraska: University of Nebraska Press, 1950), 26, 37, 39; Peters, *Women of the Earth Lodge: Tribal Life on the Plains*, 4; W. Raymond Wood and Thomas D. Thiessen, eds., *Early Fur Trade of the Northern Plains: Canadian Traders Among the Mandan and Hidatsa Indians, 1738-1818* (Norman, Oklahoma: University of Oklahoma Press, 1985), 89.

<sup>8</sup> Bowers, *Hidatsa Social & Ceremonial Organization*, 64; Peters, *Women of the Earth Lodge: Tribal Life on the Plains*, 77–78.

<sup>9</sup> Peters, *Women of the Earth Lodge: Tribal Life on the Plains*, 49–50.

<sup>10</sup> Bowers, *Mandan Social and Ceremonial Organization*, 62–63.

<sup>11</sup> *Ibid.*, 94–95.

<sup>12</sup> Peters, *Women of the Earth Lodge: Tribal Life on the Plains*, 51–57.

<sup>13</sup> Bowers, *Hidatsa Social & Ceremonial Organization*, 184–207.

<sup>14</sup> Philippe Regis de Trobriand, *Military Life in Dakota: The Journal of Philippe Regis de Trobriand*, trans. Lucile Kane (Lincoln, Nebraska: University of Nebraska Press, 1951), 69.

<sup>15</sup> F. A. Chardon, *Chardon's Journals at Fort Clark, 1834-1839*, ed. Annie Heloise Able (Lincoln, Nebraska: University of Nebraska Press, 1997), 65.

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- <sup>16</sup> Karl Bodmer, *JANUARY 26: Bison-Dance of the Mandan Indians in Front of Their Medicine Lodge in the Mih-Tutta-Hangkush*, engraving after drawing, January 26.
- <sup>17</sup> Catlin, *Letters and Notes on the Manners, Customs, and Conditions of North American Indians*, 1:128.
- <sup>18</sup> Peters, *Women of the Earth Lodge: Tribal Life on the Plains*, 137–138.
- <sup>19</sup> Russell Reid, ed., *Lewis and Clark in North Dakota* (Bismarck, North Dakota: State Historical Society of North Dakota, 1988), 120.
- <sup>20</sup> Bowers, *Mandan Social and Ceremonial Organization*, 111–123.
- <sup>21</sup> Bowers, *Mandan Social and Ceremonial Organization*, 124–128.
- <sup>22</sup> *Ibid.*, 126–130.
- <sup>23</sup> *Ibid.*, 131–135.
- <sup>24</sup> Bowers, *Mandan Social and Ceremonial Organization*, 147–150.
- <sup>25</sup> Peters, *Women of the Earth Lodge: Tribal Life on the Plains*, 31.
- <sup>26</sup> Bowers, *Mandan Social and Ceremonial Organization*, 168.
- <sup>27</sup> *Ibid.*, 170–172.
- <sup>28</sup> Catlin, *Letters and Notes on the Manners, Customs, and Conditions of North American Indians*, 1:147, 160.
- <sup>29</sup> Bowers, *Hidatsa Social & Ceremonial Organization*, 287–288.
- <sup>30</sup> Bowers, *Mandan Social and Ceremonial Organization*, 106–118.
- <sup>31</sup> *Ibid.*; Bowers, *Hidatsa Social & Ceremonial Organization*, 287–288.
- <sup>32</sup> Wood and Thiessen, *Early Fur Trade of the Northern Plains: Canadian Traders Among the Mandan and Hidatsa Indians, 1738-1818*, 85.
- <sup>33</sup> Peters, *Women of the Earth Lodge: Tribal Life on the Plains*, 1, 20.
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- <sup>35</sup> Peters, *Women of the Earth Lodge: Tribal Life on the Plains*, 144.
- <sup>36</sup> Trobriand, *Military Life in Dakota: The Journal of Philippe Regis de Trobriand*, 235.

- <sup>37</sup> Clyde D. Dollar, "The High Plains Smallpox Epidemic 1837-38," *The Western Historical Quarterly* 8, no. 1 (January 1988): 17.
- <sup>38</sup> John Koster, "Smallpox in Blankets," *Wild West* 25, no. 2 (August 2012): 38.
- <sup>39</sup> Dollar, "The High Plains Smallpox Epidemic 1837-38," 26.
- <sup>40</sup> Koster, "Smallpox in Blankets," 40.
- <sup>41</sup> Dollar, "The High Plains Smallpox Epidemic 1837-38," 18–23.
- <sup>42</sup> Chardon, *Chardon's Journals at Fort Clark, 1834-1839*, 118–128.
- <sup>43</sup> *Ibid.*, 122–124.
- <sup>44</sup> *Ibid.*, 126.
- <sup>45</sup> *Ibid.*, 133.
- <sup>46</sup> Dean R. Snow, *The Archaeology of North America* (New York: The Viking Press, 1976), 99.
- <sup>47</sup> Dollar, "The High Plains Smallpox Epidemic 1837-38," 32.
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- <sup>49</sup> Bowers, *Mandan Social and Ceremonial Organization*, 115.
- <sup>50</sup> Martin BearsArm, *The Real Site of Like-A-FishHook, 1834-1831*. North Dakota State Historical Society, [http://history.nd.gov/exhibits/lewisclark/likefishhookvillage\\_tribes.html](http://history.nd.gov/exhibits/lewisclark/likefishhookvillage_tribes.html).
- <sup>51</sup> Bowers, *Hidatsa Social & Ceremonial Organization*, 161.
- <sup>52</sup> Wilson, *Buffalo Bird Woman's Garden*, 4-9.
- <sup>53</sup> Peters, *Women of the Earth Lodge: Tribal Life on the Plains*, 76.
- <sup>54</sup> Bowers, *Hidatsa Social & Ceremonial Organization*, 94.
- <sup>55</sup> *Ibid.*, 175, 178, 180–182, 194–195, 397.
- <sup>56</sup> *Ibid.*, 441; Bowers, *Mandan Social and Ceremonial Organization*, 130.
- <sup>57</sup> Bowers, *Mandan Social and Ceremonial Organization*, 205.
- <sup>58</sup> *Ibid.*, 34, 105.