Ecotourism as a catalyst for social resiliency and the cultural preservation of the Mandan, Hidatsa and Arikara tribes

C. A. Wiley

Department of Architecture & Landscape Architecture, North Dakota State University, USA

Abstract

The United States harbors a painful history of cultural genocide among its native people. Today, many native communities remain hopeful that they can not only persevere but again prosper their specific cultures in an environment of fractionated land holdings and restricted economies with renewed social capitol and great, yet slowly eroding cultural capitol. Using a social resilience-based perspective, this study looks at the promise of ecotourism beyond (albeit including) its potential for economic development for three cultures and three communities that share heritage and landscape in rural North Dakota: the Mandan, the Arikara and the Hidatsa people. With few native speakers of the three languages, the effects of globalization and limited culturally based employment opportunities, these Three Affiliated Tribes earnestly seek additional tools for cultural preservation. This paper includes a series of proposals for tourism product development using existing assets in three communities to sustain culture in pursuit of the all-encompassing goal of total sovereignty.

Keywords: ecotourism, social resiliency, economic development, Native Americans, cultural preservation.

1 Introduction

The Fort Berthold reservation of the Three Affiliated Tribes of the Mandan, Hidatsa and Arikara people (MHA nation) is presently located on one million acres in north-western North Dakota adjacent Lake Sakakawea. This study
begins with a description of the current social and economic situation of the Three Affiliated Tribes explained through a historical perspective with emphasis of the role of history of the Three Affiliated Tribes’ social and economic resilience. At the tribe’s request, fifteen tourism planning students from North Dakota State University assessed the natural capital of the reservation and used cultural references provided by tribe members to propose potential ecotourism initiatives that can begin with minimal capital investment. By diversifying what is currently a rigid economy, the class suggestions hold potential to contribute to the economic and social resilience of the tribe. The proposals equally hold potential for cultural preservation by recommending marketable opportunities for tribe members to share their culture with visitors while passing down the same knowledge to younger generations of tribe members.

The proposals here comprise a few within a series of suggestions for integration of both traditional and novel development possibilities for the Three Affiliated Tribes. If successful, they may begin to mitigate one or two issues stemming from social and environmental injustices. These are part of a concerted and personalized effort to engage stakeholders in the decision-making process to address through strategic culture-based ecotourism initiatives a few of the socio-economic problems long felt by the three tribes.

2 History of resilience of the three affiliated tribes

2.1 Social resilience

The earliest historical accounts of the Three Affiliated Tribes describe the Mandan as “a large and powerful nation” hosting an aggregate of approximately 1,000 stationary earth lodges. Although most history books credit Philadelphia’s year 1740 population of 13,000, as the largest city in America at the time, historians estimate that at least 15,000 Mandan lived along the upper Missouri River in 1738. This population was divided into nine proximal villages each with an economic unit, hunting, protection and a garden section (NPS [1]).

The population of the three tribes thrived until 1782, when having no prior exposure and consequently high vulnerability to European diseases, the first small pox epidemic reduced the populations of each tribe. Three more small pox epidemics followed in the next half century, culminating in the shock of a final outbreak in 1837 that halved the populations of the Arikara and Hidatsa tribes and nearly wiped out the Mandan tribe, reducing it to just 125 people (Sanstead [2]).

For safety and security, the surviving Mandan and Hidatsa tribes banded together immediately following the outbreak. Their unity helped them to survive cholera and raiding bands of Lacota (Sioux). The Arikara people joined them in their new village of Like-A-Fishhook twenty years later (Sanstead [2]). As the population recovered, ten new villages were founded along the upper Missouri River with hospitals, schools, churches, businesses and homes forming the majority of the Three Affiliated Tribe’s built capital. Culture of the tribes centered on the practices, stories and traditions pertaining to agriculture with emotional and religious ties to the Missouri River bottomlands (Meyer [5]).
From 1947–1954, the Three Affiliated Tribes experienced a compulsory rapid and directional change to their land occupation. The United States federal government with the US Army Corps of Engineers engaged in construction of the Garrison Dam to stem flooding along the Missouri River. The building of the dam forced members of the three tribes to vacate their rich towns and agricultural bottomlands which covered 62,717 hectares along the Missouri River - one quarter of the reservation. With nearly 80% of the tribal membership forced to move, the Three Affiliated Tribes dispersed to the arid hills surrounding the Missouri River flood plain splitting their previously close communities into the distal towns of Twin Buttes (Mandan), Mandaree (Hidatsa), Lucky Mound (Hidatsa) and White Shield (Arikara) with New Town established as the administrative center of the reservation (Lawson [4]).

The uprooting of kinship and other social groups within the three tribes destroyed the community life fundamental to the tribe’s cultures and as a result, crushed their social resilience (Lawson [4]). Sustaining livelihoods and human well-being during social–ecological change requires social cohesion and by extension, strong family associations, the ability to help others and provide for children, and the ability to express and experience aesthetic, spiritual, and cultural values (Kofinas [6]). Such higher-order values are the basis for social capital—the capacity of a group to work together to address and solve problems (Coleman [7]). And although the values remained in existence, the evacuation of the Three Affiliated Tribes from the Missouri River bottomlands made their practice essentially impossible. Following the taking, unemployment rose to 70% and tribal members were driven to a life of despair. Because rebuilding lost social capital is very slow, particularly in the face of lost economic and built capital, a generation of hard work passed before the tribes showed signs of recovery. Today, many tribal members continue to bear emotional scars of their displacement (Lawson [4]). The Three Affiliated Tribes are hopeful that new economic opportunities can strengthen their social cohesion and sustain spiritual and cultural values.

2.2 Economic resilience

Attracted to the fertile bottomlands of the upper Missouri River and its tributaries, the Mandan, Hidatsa and Arikara developed extensive agriculture and trade based economies augmented with the hunting buffalo and the large game of the river’s woody banks. By the time of contact with European explorers, these three affiliated tribes had invested 700 years of settlement in what is present day North Dakota and were tremendously adapted to its environment (NPS [1]).

The people so proficiently farmed their floodplain gardens that they had extensive surplus which they traded. This, in addition to proximal game and flint quarries ensured that their fortified settlements formed two of six primary trade centers in western North America. French trader Sieur de La Verendrye, the first known explorer to encounter the tribe described that the Mandan “feared none of their neighbors”. “The goods they produced were almost necessities among other tribes and they were able to dictate their own terms” (Sanstead [2]). Even after the 1837 small pox epidemic that resulted in sharply decreased populations and
territories, the economic resilience of the Mandan and Hidatsa engendered the reestablishment of another major commercial center at their new community at Like-A-Fishhook.

At the time of European settlement, many plains Indians relied primarily on the bountiful herds of plains buffalo for their livelihood. Such tribes, never having experienced the stress of limited quarry were socially and economically vulnerable to the rampant destruction of their staple food source by non-native newcomers in the mid 19th century (Birnbaum and Malakoff [3]). However, with agriculture still intact and forming the basis of their wealth, the economy of the Mandan, Hidatsa and Arikara was resilient to the loss of the buffalo until in 1954 (NPS, Sanstead [1, 2]).

The economic variation previously enjoyed by the tribes was non-existent by the mid twentieth century, leaving the Three Affiliated Tribes solely reliant on agriculture for revenue. As a result, they were vulnerable to any shock to their economy. The single act of flooding ten communities and 94% of their agricultural lands in 1954 severed the Mandan, Hidatsa and Arikara tribes from the economic base they had for nearly a millennia; nearly destroying their way of life (Sanstead [2]). This was an environmental injustice by any standard and the result was instant poverty.

It took several decades for the three tribes to begin to replace their agricultural economy with new industries. The dry uplands on the reservation were very difficult to farm and new lands given to the three tribes to replace the taken lands were the non-arable rocky bluffs of North Dakota’s badlands. A return to farming was viewed as an impossibility on these lands by many tribe members so they sought economic development in other industries. However, the hilltops along the Upper Missouri River are fraught with exogenous hazards of draught and extreme cold which hamper opportunities for new development.

Initially, energy was spent replacing some of the built infrastructure of the lost lands including health and education facilities with some supporting tribal government and service commercial ventures. 1966–2009 saw the development of a few businesses. Gaming has helped the economy but cannot alone meet the fundamental needs of the Fort Berthold reservation. The newest economic initiatives include oil and gas leases and an enlivened interest in cultural tourism with the development of an earthlodge cultural center and a bison hunting ranch.

As is often the case with Native American tribes in the United States, land use policies have engendered disincentives for self-sufficiency instead of the development that was intended by them thereby creating repeated cycles of dependency. Unemployment remains high on the reservation. Fifty three percent of the welfare cases in the state of North Dakota were comprised of Native American persons in 2001, suggestive of the long term endogenous stress described here. The Three Affiliated Tribes have identified a need for collaboration in the areas of job creation and job training (Sanstead [2]).

2.2.1 Future economies

These two development trajectories in other places could each develop into a threat to their local environment; chiefly in the forms of over exploitation of oil
and gas and mass tourism. There are several factors that protect the Fort Berthold Reservation from such vulnerability.

Because Fort Berthold is a Native American reservation, its residents are victim to a morass of red tape legislation preventing expeditious development of reservation property for oil and gas extraction. There is immediate financial need for such an industry. However, without the current 49 step process to sell drilling rights, drills might go up everywhere on the reservation without consideration for aesthetics, tourism, recreation or other industries. The long harbored demand to meet basic individual and community needs may overshadow tribal values for ecosystem stewardship. Such regulation and development limitations may have in part prevented heavy reliance on ecosystem services that typically drive environmental vulnerability in places fraught with economic poverty. However, the red tape could be eliminated, putting the MHA nation on the cusp of rapid directional change. An ideal solution would be the removal of hyper regulation together with development of a detailed masterplan for land use that considers community needs and drilling potential in the context of other existing and potential ecosystem services.

Although tourism generates the second highest gross receipts for the state of North Dakota, the Fort Berthold reservation is unlikely to suffer either mass tourism or its effects. With harsh winters lasting up to five months, North Dakota receives the fewest visitors of any other state in the US. Moreover, the Fort Berthold reservation is remote from large cities and airports. It is en route between very few destinations. With such constraints, tourism here can only serve to diversify an existent economy, not replace it. Increasing economic diversity in this way reduces social and economic vulnerability and facilitates adaptation to economic or environmental change (Kofinas and Chapin [6]). The reason is that it is unlikely that various economic activities would be equally sensitive to any single economic and political or environmental change. By extension, the diversification of livelihoods within individual family groups can broaden the capacity of each group to cope with change (Kofinas [6]).

If a range of tourism opportunities are developed as collaborative initiatives (rather than a single major initiative), some will remain successful under whatever new conditions arise, reducing the probability of economic collapse. As typical in complex adaptive systems, those experiments that are successful will persist, and the failures disappear. Social learning further increases the likelihood that successful solutions will be adopted by other members of the tribe, expanding the base of tourism products on offer to visitors. By gathering these experiments into guided daytrips and using cooperative scheduling, members of the Three Affiliated Tribes can generate enough critical mass of tourism products (things to see and do) to draw a captive audience. When a series of small tourism projects using existing infrastructure and cultural capital are pulled together into guided day trips tailored to the visitor, the resultant economy can generate the revenue necessary to build new community facilities, which in turn can provide venues for new tourism initiatives. This approach embraces flexibility to engage various programs on demand and holds potential to involve many tribal stakeholders in community based tourism.
3 Natural capital on the Fort Berthold reservation

The reservation consists of nearly 1 million acres. These are primarily of three kinds of ownership: tribally owned lands, lands which are kept (although fractionating) in individual allotments and lands were opened up to settlement by non-natives. The overwhelming majority of the lake frontage and the scenic badlands within the reservation is native-owned land.

The North Dakota Badlands were so named because they are challenging to negotiate when travelling and unworkable for cultivation. This rugged landscape which once prevented economic development can now catalyse it through tourism. Lake Sakakawea, named after the famed Hidatsa guide of American Explorers Lewis and Clark was created by the damming of the Missouri River. As the third largest man-made lake in North America, this lake is one of the premier boating and fishing recreation amenities in the state. The scenic beauty of the uplands varies from stunning rugged buttes in the west to rolling hills in the eastern segment of the reservation. A national scenic byway runs through the Western part of the reservation. Many of the food, craft and cultural plants that originally grew in the uplands are still there. Meat eating birds – raptors – are of cultural importance to the Mandan and can be seen with regular frequency near the lake. Through husbandry efforts on the bison ranch, the MHA Nation Tribal Tourism department has re-established the purity of their plains bison DNA by breeding out the genes of cattle that were added to the bison gene pool a century ago.
4 Cultural capital of the tribes

4.1 Language

Language is currently one of the most vulnerable features of Native American culture. With current tribe populations beneath 1,000, this vulnerability increases notably with the death of each fluent speaker. Spoken by dwindling numbers of primarily elderly speakers, the languages of the Mandan, Hidatsa and Arikara are endangered, with Arikara and Mandan classified as nearly extinct according to the Ethnologue (Lewis [9]). With the help of these few remaining speakers, the three tribes have undertaken a project to make language recordings for future generations. The tribes are now aggressively teaching the native Mandan, Hidatsa and Arikara languages in the reservation schools. This is important because language use supports preservation of cultural beliefs, concepts and themes which would be lost in translation to a different language. According to Hidatsa historian Calvin Grinnel, fluency in the ancestral language has become the core test of [an individual’s tribal] identity (Springer [10]). The three languages will remain endangered if the children leave or are transplanted into communities that use another language when they are adults (UNESCO [8]). Since the primary reason adult tribe members leave the reservation is for work, economic development that may use language speakers in particular is paramount to cultural survival.

If language is critical to culture, it is by extension critical to cultural diversity. The importance of cultural diversity extends beyond the reservation-cultural diversity broadens the range of perspectives and experiences with which to withstand or adapt to large-scale environmental and social changes (Kofinas [6]).

4.2 Legendary associations

Although many Americans remain uninformed of the full history of any Native American tribe, each of the Three Affiliated Tribes have had well renowned members and associations intricately connected with historical events well known to most Americans.

4.2.1 The expedition of Meriwether Lewis and William Clark

The Mandan saved the Lewis and Clark expedition after their diplomatic debacle with the Teton Sioux (Lakota) in 1804 [11, 12]. The explorers overwintered with Mandan for several months on their famed exploration of the Missouri River, recording their good relations with the tribe.

4.2.2 George Caitlin, Karl Bodmer, Prince Maximilian zu Wied-Neuwied

American artist George Caitlin was hosted by the Mandan in 1833 which allowed him to create now famous drawings of the Mandan and Hidatsa tribes. His exploration was followed by Swiss artist Karl Bodmer several months later who, travelling with German Prince Maximilian zu Wied-Neuwied, stayed with the Mandan and Hidatsa for two months. Bodmer’s drawings together with Maximilian’s observations of their trip still generate name recognition of the tribes abroad.
4.2.3 Sakakawea (Hidatsa spelling)
Hidatsa people claim that the guide of Meriwether Lewis and William Clark, Sakakawea was always a member of their tribe. Her childhood is also claimed by the Shoshone tribe, a historical misunderstanding according to the Hidatsa people. Her importance to American history earned her a depiction is depicted on the first gold one dollar coin of the United States, also known as the Sacagawea dollar.

4.2.4 Bloody Knife, Ree Scouts
Arguably the most famous battle between the US cavalry and Native Americans was the Battle of Little Bighorn, in which General George Custer battled a massive gathering of Lakota and Northern Cheyenne tribes. Long enemies of the Lacota (Sioux), the Arikara tribe sent scouts to assist American general Custer. The leader of these, Bloody Knife is buried in a cemetery with other scouts that fought in the famed battle in addition to Arikara veterans of foreign wars. The “Old Scouts Cemetery” is on the reservation near the Arikara town of White Shield.

4.2.5 Horseriding champions
The Mandans have many past and current horseback riding champions in the tribe. They take great pride of their tribal mastery of horse riding. Riders demonstrate their superb skills at the annual suicide races in New Town.

4.2.6 Buffalo Bird Woman
Ethnographer Gilbert Livingston Wilson carried out extensive studies with the elderly Hidatsa woman, Buffalo-Bird Woman at the turn of the 20th century. Buffalo Bird Woman shared with him information about Hidatsa customs including traditional economy, ceremony, and day-to-day practices which he faithfully recorded in her voice in his book “Buffalo Bird Woman’s Garden”. This book remains a widely referenced record of traditional native gardening.

Three Affiliated Tribes have a well documented history in part through these associations. When added to the invisible myths and legacies of the three cultures, the multitude of artifacts strengthens the resilience of the tribe to contemporary mass media driven cultural homogenization.

4.3 Legends and cultural narratives
The Three Affiliated Tribes have well kept and accurate records of beliefs, legends, traditions and values in written form in several books including Mandan Social and Ceremonial Organization and Hidatsa Social and Ceremonial Organization by anthropologist Alfred W. Bowers and Traditional Narratives of the Arikara Indians by Douglas R. Parks. Cultural preservation commands the retelling of these stories where appropriate. When conducting guided trips, tribe members can maintain their knowledge of traditional myths by repeating them to visitors.

Some critical slow variables that can affect tourism success include global warming, desertification, fractionation of tribal lands and globalization.
Development planning and most new ecotourism ventures should be flexible enough that the activities can shift location or focus as needed to stay viable and engage as many people as practicable to reinforce and conserve the existent cultural capital of each tribe. This is a radically different than a paradigm of developer-driven single brick-and-mortar tourism development such as theme parks or ski resorts.

**4.4 Cultural constructions-built capital**

The three affiliated tribes have a well-funded history museum in Four Bears Village near the new earthlodge village and the casino. The earthlodges in the earthlodge village are available to tourists as sleeping accommodation for medium to large groups and tepees are available for couples and small groups. Cultural constructions also exist in the satellite communities. These include an Arikara cultural center in White Shield, The Lone Man Shrine, in Twin Buttes, seven stone shrine, in Twin Buttes, earthlodges near Mandaree and Twin Buttes, and community centers with large kitchens for cooking lessons and community event catering. The bison ranch features large bison enclosures for animal viewing and round-ups, two log cabins and a ranch house used as a bed and breakfast. If proposed tourism initiatives are designed to use existing built capital, community facilities in the future should be conceived in consideration of a culture tourism use when not in demand for the tribe.

![Proposed International Bison Center](image)

**Figure 2:** Proposal for International Bison Center.

To support cultural identity, new constructions should celebrate the spirit of place, long-held values of the tribe and continuance of cultural practices. In a long-range scenario, as a flexible approach to tourism develops, the tribes may choose to build one or two new facilities that simultaneously support their culture and tourism. Ideas generated by the class included an expansion of the Bison Ranch into the International Bison Center near Mandaree and a new Raptor Rehabilitation Center in Twin Buttes. These two proposals are inspired by current cultural reverence for bison and eagles respectively and are both extensions of existing practices involving the animals.
5 Suggestions for tourism development on the Fort Berthold reservation

Based on the study of history, oral traditions, landscape and culture, the NDSU tourism planning class developed some of the following ideas.

5.1 Seek opportunities to use the Missouri river that once unified the three tribes

These may include a marina in White Shield, a dock in Twin Buttes and possible boats for hire to carry visitors between to see the flooded towns and to link ecotourism products in the two towns.

Figure 3: Proposal to light the flooded Like-A-Fishhook village for an hour each evening to draw visitor attention to the story of the flooded communities. Three lamps are shown representing the three tribes who first banded together at this village.

5.2 The story of the flooding remains important to the tribe and thus should be told and interpreted by the tribe

Figure 4: Signage along the river can help visitors imagine the drowned villages.
5.3 Make new tourism initiatives simple and flexible

![An Arikara scout camp along the water can teach children how to become warriors.](image)

Figure 5: An Arikara scout camp along the water can teach children how to become warriors.

5.4 New tourism initiatives engage the proximity of local fauna of importance to the tribe

This could include a Mandan raptor rehabilitation center for injured birds, birding trails and public viewing of the tribe’s bison.

5.5 New tourism initiatives engage tribal language where practicable

To engender a marketable value for learning native languages well in school, children might be included in tourism programming. Some suggestions might include performances by children and employing teen apprentice tour guides. Jobs for adults with language skills may encourage language scholarship. These could may engage cooking or canning lessons of native foods partly using native language, production of bilingual both directional and informational signage and storytelling.

![Interpretive signage near thermals along the bluffs of Lake Sakakawea could identify migrating birds in English and three native languages.](image)

Figure 6: Interpretive signage near thermals along the bluffs of Lake Sakakawea could identify migrating birds in English and three native languages.
5.6 New tourism initiatives take advantage of the rich oral history of each tribe

Keep stories and songs in the collective memory by sharing them with visitors.

Figure 7: Story telling.

5.7 New tourism initiatives directly reference legendary associations of the three affiliated tribes

Figure 8: A proposed kiosk behind the Bloody Knife memorial at the old scouts’ cemetery with (credit card swipe) rental phones. These phones contain on-demand recordings of the Arikara song specific to each soldier.
Figure 9: Plan typical of Buffalo Bird Woman’s garden (Maxi’diwiac [13])
sf = sunflowers, b = beans, c = corn sq = squash.

Figure 10: Borrowing inspiration from Buffalo Bird Woman’s garden above, the class proposed that one stop on a daytrip of the reservation includes a walk through one of the tribe’s existent gardens grown in the traditional style.

Figure 11: Ecotourists will experience a modern rendition of George Catlin’s buffalo round up on rounding bison the existing Bison Ranch.
Figure 12: Karl Bodmer’s famous paintings, such as the dance of the Hidatsa Dog society are brought to life in contemporary celebrations.

5.8 Where practicable, proposed tourism initiatives should use existing built capital

Figure 13: The existing Arikara cultural center building in white shield is primarily for community functions. It has an artifact display room for both residents and tourists. Additional interior displays (A) can be added to high walls where they will not obstruct use of the great room. A proposed native plants garden around the facility (B) can extend cultural education for both tribal children and visitors.

5.9 Design new constructions to accommodate tourism as a secondary use

The primary objective with this kind of development is that it should strengthen the cultural and economic resiliency of the Three Affiliated Tribes and in so doing, fortify their social resiliency. As such, tribal purposes, such as education programs using products available for visitors or ceremonies in places that are otherwise open to tourists must be given priority over tourism. By extension, engagement of a tourism product in the living culture of the people will ensure authenticity of the product.
6 Caveat

It is important that ecotourism proposals take advantage of the three distinct cultures of the MHA Nation and that they are flexible and coordinated rather than competitive. For this reason, developments in each segment of the reservation should be distinct and connected to those in other segments. However, redundancy of ecotourism as a theme in new initiatives will augment the likelihood that valuable functions and services will be retained during periods of rapid economic, environmental or social change for the tribes. The decision to adopt any suite of ideas or actions rests with the MHA Nation, the individual tribes and mostly to the entrepreneurial enterprise of multiple small groups and individuals within the tribes. Establishing effective social–ecological adaptive capacity requires the integration of multiple perspectives. This way of planning is wholly different from an archetype of either external forces directing change or of management delaying decisions until the group believes that it knows enough not to make mistakes. The latter approach is universally used as an excuse for avoiding short-term risks and maintaining the status quo. It should be noted that the decision not to take action is just as explicit a decision as acting decisively. Kofinas [6]

7 Conclusion

Diversifying the economies of the Three Affiliated Tribes in such a way that it reinforces long held social, cultural and intellectual values of its members can contribute to the social resilience of the tribes. Resilience can in turn provide tribe members with a means to buffer against unexpected social, economic and environmental change. The challenge is to avoid innovations that provide short term benefits at the cost of long term capacity to sustain development.

References

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