

## Restoration and the Affective Ecologies of Healing: Buffalo and the Fort Peck Tribes

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### Abstract

Intentional acts of restoration are purported to have a multitude of benefits, not only for non-human nature, but for the people who conduct restoration. Yet, there is limited scholarship that considers the nature of these benefits in all of their complexity, including psychological and spiritual dimensions. Using the case study of the restoration of bison/buffalo by the Sioux and Assiniboine tribes to their reservation in Montana, USA, we observe that ecological restoration can promote and facilitate emergent and dynamic processes of reconnection at the scale of individuals, across species and within community. In an indigenous setting marked by historical trauma and other challenges, these re-connections have therapeutic benefits that align with the relationality that mental health frameworks suggest is a key protective factor for many indigenous people. Affective experiences of and with buffalo play an important role in building and articulating that therapeutic relationality in our case study. Our work points out the importance of access to spaces of affective ecologies and personal investment in spiritual traditions as elements of the therapeutic benefits of restoration in this case, raising questions and possibilities for future research that considers patterns and avenues of diffusion of restoration benefits within social groups more broadly.

**Keywords:** reciprocity, restoration, bison, buffalo, Fort Peck, Sioux, Assiniboine, affective ecology, keystone species

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### INTRODUCTION

The histories of Native American tribes and the wild bison of the central and western United States rank among the most powerful narratives of linked social and ecological fortunes of the modern age. In this story, resilience dynamics play out over centuries at vast scales, with the entire societies and ecosystems changing together in response to epochal developments: the end of Ice Age, the arrival of the horse, and the invasion of the American West by railroads and markets (Haines 1977). By the 1880s, both the bison and Native Americans of the Plains were facing an epic battle for survival. As their fortunes suffered, so did the ecological resilience of the extensive grasslands systems that nourished them (Isenberg 2000). The twenty-first century marks a new, more optimistic chapter in this longer social-ecological narrative. Native American self-determination efforts have encouraged a major cultural and

And I believe we all have that ability as individuals to take from the buffalo and be good medicine to each other in regards to positive thoughts and actions and behaviour towards one another. They're teaching us. We have to stop and watch and look for them. Hearing one of my brothers who killed a buffalo out there, how the other ones would come there and try to lift it, pick it up. This is how we should be with each other.

*Sioux elder from the Fort Peck tribes, 2015*

ecological renaissance in which the reintroduction of bison to tribal lands commands a central role, in keeping with bison's status as a cultural keystone species (Garibaldi and Turner 2004). These developments create a unique opportunity to explore affective ecologies of restoration.

This article reports on ongoing research focused on the experiences of the Assiniboine and Sioux tribes of the northeastern Montana's Fort Peck reservation with buffalo restoration.<sup>1</sup> The Fort Peck tribes first welcomed buffalo to their 2-million acre reservation in 2001 after a 120-year-long absence. The tribes have continued to grow their herds, including in their historic role as the first Native American tribes to welcome buffalo stranded by the ongoing controversy surrounding the bison migration out of Yellowstone National Park (White et al. 2011). Our work proceeds through a community-based participatory research (CBPR) model (Rink et al. 2016) and reflects priorities of the Assiniboine and Sioux community members who work with our research team and our broader scholarly commitments. Our community partners invited us to conduct research on the outcomes of buffalo restoration for individual and community health and well-being. Many aspirations accompany buffalo restoration at Fort Peck, including the hope that the presence of buffalo and their reintegration into community life will mitigate profound mental health, physical health, and economic disparities that affect many members of the Fort Peck tribes. The perceived healing potential of buffalo has myriad elements, including changes in diets and economic diversification. In this article, we focus on how buffalo may shape the health of individuals and communities at Fort Peck through affective experience: the affective ecologies of buffalo restoration.

Affective experiences are those involving the embodied sensation and experience of the force of other bodies and beings. Affect theory emphasises that 'being' (human or non-human) is not an essential, predetermined condition but emerges through relations (Ingold and Palsson, 2013). To focus on affective ecologies, then, is to explore and emphasise the importance of the emotive/emotional, sensory, and other experiential ways that humans and non-human nature 'relate'. An affective ecologies perspective understands such non-rational experiences as critical to participation in and experiences of resource use and environmental politics (Singh 2013, 2016). To explore outcomes of the buffalo restoration movement at Fort Peck, our approach joins closely-related conceptual frameworks including the reciprocal restoration (Tomblin 2009; Kimmerer 2011), postcolonial models of mental health (Gone 2016), and affective ecologies (Singh 2013, 2016). We hope to promote a dialogue among these frameworks as well as to emphasise the benefits of analytical approaches to ecological restoration that understand self, society and nature as co-constitutive (Guattari 2005). In particular, we hope to demonstrate that an appreciation of affective dimensions of restoration can amplify and expand the call for multi-dimensional approaches to measuring restoration success (Wortley et al. 2013).

The article proceeds as follows. In the remainder of Part 1, we draw connections between literature on restoration,

indigenous concepts of health and affective ecologies. The Part 2 provides an introduction to the study area and context, and a discussion of methods. In Part 3, we present and analyse affective aspects of buffalo restoration, based on a series of in-depth interviews conducted in 2015 with leading figures in the buffalo restoration movement at Fort Peck. The conclusion offers the summary of thoughts about expanding the role of affective ecologies in evaluating restoration outcomes.

### Scholarly context

Within the broad category of ecological restoration (Egan et al. 2011), Fort Peck's efforts exemplify the kind of "reciprocal restoration" associated with "Indigenous People's Restoration Culture" (Tomblin 2009). This approach (among 3 categories of cultural approaches to restoration cultures identified by Tomblin) focuses on the restoration of life ways and food for cultural survival and as expressions of self-determination. Tomblin's observations are reinforced in Robin Kimmerer's 2011 synthesis that draws attention to reciprocity, holism and spirituality as unifying values guiding indigenous restoration efforts. Invoking the adage that "what we do to the land we do to ourselves," Kimmerer (2011: 263) highlights the continuity across humans and non-human nature in the majority of indigenous world views. In the case of Fort Peck, restoration focuses not on land but on animals and a particular "cultural keystone species" (Garibaldi and Turner 2004). However, as this article will demonstrate, the kind of relationality between land and people expressed in Kimmerer's framework applies equally to how Sioux and Assiniboine world views approach human-buffalo relations.<sup>1</sup> (We switch here to using the term buffalo, the standard English term used by Sioux and Assiniboine peoples to refer to bison).

Kimmerer's review goes on to observe the strong connection between the cultural and the spiritual in indigenous societies, noting that paradigms of restoration grounded in western science struggle to capture this dynamic.<sup>1</sup> This critique suggests the importance of exploring alternative models for evaluating restoration. Implicit in the concept of reciprocal restoration, but open for further exploration, is the idea that restorative processes occur at the scale of the self as well as at the natural-cultural collective/community. In providing fundamental concepts and frameworks to understand the processes of recovery of self, society and nature, scholarship on American Indian mental health frameworks provide helpful guidance for our work.

According to American Indian epistemologies, to be healthy is to have access to a full spectrum of relational experiences. Spirituality, reciprocity, interdependence, and harmony within families, tribes or clans and the natural world are basic elements of American Indian belief systems (Dieter and Otoway 2002; Salois et al. 2006; Marks 2007). Current research links the significant health disparities witnessed among American Indian populations today in the United States directly to the disruptive effects of colonisation on world views emphasising relational harmony, reciprocity, and

connectedness (Duran and Duran 1995; Brave Heart 1998, 2003; Grandbois 2005; Breland and Park 2008). Emerging models of American Indian and Native Alaskan health and well-being focus heavily on understanding, nurturing and restoring relationality between self, society and the natural world (Whitbeck et al. 2004; Hill 2006; Jervis et al. 2006). In rethinking suicide prevention paradigms, for example, Wexler and Gone (2012: 805) note that a marker of maturity in many indigenous societies is not the quest for independence, but rather the demonstrated knowledge of “one’s role in a shared and co-created” reality, something, they argue, that “stands in stark contrast to ... [the] notion of individuation as an essential stage in becoming an adult in Western culture.” Mohatt et al.’s (2011) 12-item scale designed to measure awareness of connectedness as part of a mental health evaluation for Native Alaskan communities is another example of the scholarly recognition that feelings of connection, including to place, family and community, are core elements of well-being and mental health.

In traditional Assiniboine and Sioux belief systems, buffalo and humans are related through ancestral heritage. In this relational cosmology buffalo can communicate, act and relate with human beings. Given that Sioux and Assiniboine beliefs do not distinguish a conventional/Western species boundary between buffalo and human beings, and heeding the link between awareness of connectedness and mental health described above, it stands to reason that experiences that enhance and express awareness of human-buffalo relationality are important to building and sustaining individual and community health. Correspondingly, the notion of reciprocal restoration suggests that the mental and physical health benefits provided to humans are complemented by benefits to the buffalo relatives—hence the reciprocity. To approach relationality, we turn to the emerging concept of affective ecologies.

In this article, affective ecologies describe systems or spaces that create possibilities for iterative and reciprocal interspecies exchanges and communication. These are spaces that have long been emphasised in American Indian belief systems. The disruption of the physical environments that host affective ecologies are among the many problematic legacies of conquest for many cultures, including for the Assiniboine and Sioux peoples of Fort Peck. The work of buffalo restoration at Fort Peck, then, has been about re-establishing an ecology that facilitates interspecies communication and reciprocal care. Our analysis explores the kinds of experiences emerging through this reconnection. This exploration is an important (and to our knowledge, unique) attempt to document whether and how some of the hoped-for benefits of cultural keystone species restoration in an indigenous context are materialising.<sup>2</sup>

## METHODS

### Study context: buffalo restoration at Fort Peck

The Fort Peck Reservation is located in the northeastern corner of Montana and is one of the seven reservations in the

state. Fort Peck is home to two separate Indian nations, each with internal bands and divisions. Of approximately 12,000 enrolled members of the Fort Peck Assiniboine and Sioux nations, about 6,800 live on or near the reservation. The Fort Peck Sioux comprise Sisseton/Wahpetons, the Yanktonais, and the Teton Hunkpapa divisions and the Fort Peck Assiniboine comprise Wadopana (Canoe Paddlers who live on the prairie) and Hudashana (Red Bottom) bands (Fort Peck Tribes 2016). These bands and divisions remain vital and influential in tribal community organisation and decision-making. Official government occurs through the Tribal Executive Board, with its twelve voting members, chairman and vice-chairman elected at large every two years.

Fort Peck is a vast landscape comprising 2.1 million acres of rolling open prairie. The reservation boundaries include the 47 ½ parallel to the north (just south of the border with Canada) and the Missouri River to the south. Land ownership within the reservation is extensively fragmented, with communally-owned tribal lands comprising 20% of the total area and individually allotted Indian lands about 25%. Over half of the reservation lands are privately-owned by non-tribal members (American Indian Relief Council 2010). The dominant land uses within Fort Peck are dryland grain farming and grassland cattle ranching.

When serious conversations about a tribal buffalo herd gained momentum on the Fort Peck Reservation in the 1990s, it had been over a century since wild buffalo had roamed the area. Buffalo were lost to Fort Peck during the ‘starving years’ of the early 1880s when the brutality of the United States policies towards the indigenous people and the land manifested in widespread suffering. Two events in 1883 signalled the severity of the situation for the Fort Peck peoples—the banning of Sioux religious ceremonies by the United States Secretary of the Interior and the killing of the last buffalo in northeastern Montana (Miller et al. 2012: 128-130).

Decades later and beyond Fort Peck, Native American self-determination in the 1970s and 1980s led to the establishment of buffalo herds on the sovereign homelands of Native American nations lands. By 1992, there were approximately 26 tribes raising some 3,600 buffalo on tribal lands across the United States and Canada (Zontek 2007: 69). However, Fort Peck was not yet among these tribes. And by the end of the 1980s, some Fort Peck people were wondering why not. Tribal elders, elected leaders, and tribal government staff began to explore procuring land and a buffalo herd in earnest (Peterson 2001). Their efforts were supported by their engagement with the Intertribal Bison Cooperative, a group established in 1990 by 19 member tribes to coordinate and assist tribes in returning buffalo to tribal lands.

Cattle ranching presented a hurdle for buffalo restoration at that time—and continues to pose problems today—for two reasons. At the state and regional level, many cattle ranchers bitterly oppose the presence of wild bison on land bordering their ranches because of the risk of transmission of brucellosis between wild bison and domestic cattle. Livestock interests have fiercely opposed the relocation of wild bison from

Yellowstone National Park to any lands in Montana, including Fort Peck. Secondly, because most tribally-owned grassland was historically leased to cattle ranchers, establishing a tribal buffalo ranch involved a land use change that displaced ranching. The bitterness and strength of the local and state opposition to buffalo restoration are important dimensions of the tribes' experience with buffalo restoration.<sup>3</sup>

As of 2015, Fort Peck buffalo numbered about 375 and lived in two herds on the 25,000 acres of tribally-owned land. The Tribes first acquired 100 buffaloes in 2001 from the neighbouring Assiniboine and Gros Ventre tribes of the nearby Fort Belknap reservation. This herd was dubbed the 'business' herd, destined primarily to feed Fort Peck people and gain revenue for the buffalo programme of the Fort Peck Fish and Game Department through paid hunts. In 2012, the Tribes gained an historic opportunity to reconnect with the Yellowstone buffalo, the sole surviving direct descendants of the buffalo known to the ancestors of modern Native Americans in the United States. Members of this 'cultural' herd arrived from Yellowstone Park in March 2012. The herd was tripled with another infusion from Yellowstone in 2014. The Fort Peck home for the Yellowstone buffalo has special significance—it showcases the leading role the Fort Peck Tribes are playing in ending the decades-long practice of culling buffalo that migrate out of Yellowstone National Park. The Fort Peck nations and their buffalo relatives are thus working together to heal and grow from a traumatic past. Since the return of the Yellowstone buffalo, community interest in the buffalo ranch has surged, manifest in part by the formation in 2014 of a citizen-led group focused on cultural aspects of buffalo, the Pté Group (pté is both the Nakoda [Assiniboine] and Dakota [Sioux] word for female buffalo) (Smith et al. 2017).

### Data collection approach

In order to better understand outcomes of buffalo restoration, our research team conducted a series of in-depth interviews in 2015. We adhered to a CBPR framework adapted specifically to Fort Peck (Rink et al. 2016). A CBPR approach insists on research studies conducted with, for, and about Indigenous communities. CBPR methods have demonstrated the importance of Indigenous nations' proactive production of their own knowledge and the need to ensure that research with Indigenous populations has relevance for their culture and communities (Salois et al. 2006; Christopher et al. 2011; Koster et al. 2012). Like other forms of participatory research, CBPR does not offer a scripted methodology. Rather, it entails an "epistemological orientation" (Jacobson and Rugeley 2007). Citing Israel, Schulz, Parker, and Becker (1998), Stanton (2014) succinctly describes three values that guide CBPR: "Scholars should recognize and value the community as a partner in the process, research should be comprehensively collaborative, and results should benefit all partners through continuous action and clear applications." Our project was led by both MSU researchers and a Fort Peck tribal elder, and interview transcripts were member-checked by participants. Discussion by participants and interviewees informed the evolution of the research.

Using a purposive sampling approach, we targeted individuals who had been or are currently active in buffalo restoration activities. The selection rationale was that individuals engaged in buffalo restoration would be those with the greatest exposure to buffalo, and thus, best able to speak to and explore affective dimensions of the restoration process and its outcomes. While neither the interviewees nor this research claims to speak for the diverse assemblage of people living at Fort Peck, our sample does include individuals with different roles in buffalo restoration. Some interviewees held elected positions, others were staff in management of the buffalo ranch, several were spiritual leaders in the community and others were interested community members. We interviewed a total of 18 people.

The interview format was semi-structured and varied in its formality. We conducted interviews in teams of two or three, and the interviews lasted between 1.5 and 3 hours. Our interview guide featured three groups of questions regarding personal history and memories about buffalo, experiences with contemporary buffalo, and ideas about personal and community sources of resilience. In many of our interviews, informants offered stories and we attempted to follow customary expectations regarding listening well rather than strict adherence to the interview guide. Interviewees received a small cash gift in acknowledgement for their time. Interviews were tape-recorded, professionally transcribed and then coded using a grounded theory content analysis approach (Glaser and Strauss 2009). Our interviews were supplemented with participant observation at numerous meetings and community events related to the buffalo.

## RESULTS AND DISCUSSION: AFFECTIVE DIMENSIONS OF RECIPROCAL RESTORATION

The conceptual framework informing our analysis follows a basic logic of possibilities established in existing literature: affective experiences may produce or enhance feelings of relationality and connectedness. Those feelings may in turn have therapeutic potential. Therefore, restoration guided by relationality has important transformational potential. The following is analysis of statements and stories shared about feelings from and experiences with buffalo exploring these possibilities. After highlighting patterns in affective responses to buffalo, we develop a discussion of relationality as it has manifested in the buffalo restoration experience at Fort Peck. Lastly, this section discusses the intersection of buffalo restoration with personal recovery.

### Being with buffalo

The physical return of buffalo to the Fort Peck reservation has allowed for a new expression and experience of a long-standing interspecies kinship. All of the interview transcripts referred to this new opportunity to be with buffalo in terms of feelings of awe, joy and pride. The knowledge that the buffalo are nearby promotes a feeling of well-being for some. When asked about

what makes the Fort Peck tribes resilient in the face of major challenges, one interviewee simply responded, “just knowing that they’re here.” His comments suggest the tremendous importance attached to the mere presence of the buffalo.

The potency of being with buffalo in shared space, according to interview comments, has everything to do with affect. Describing the importance of having the buffalo on the reservation, one interviewee said “when I miss them I go to them, you know?” Her word choice emphasises the kinship quality of the relationships that our interviewees have with buffalo. In her description, she and other elders drive out to a place on the ranch where they can see the herds grazing in order to watch, listen to and experience them. “Being with” buffalo in this way makes her feel restored. She went on to say that she also benefited from other ways of being with them, “... at the same time praying for them, eating them...”

Interviewees frequently commented on the strength of the buffalo, in both the physical and the metaphorical sense. Describing a public celebration after the return of Yellowstone buffalo, one interviewee said: “I mean, never in my whole life did I ever feel that I would be sitting there with our governor and all these other leaders and basically praying and celebrating that the bison were finally back here. It was a tremendous feeling.” Another interviewee said, “with the buffalo I see not just an animal but I see in the qualities of the buffalo this strength, endurance, perseverance, fortitude. You know, facing those things that [challenge us].” In this statement, the speaker invokes a sense of pride in the endurance of his own people against tremendous hardships. But his is more than the symbolic pride of having won a fierce political battle over appropriate ecologies with dominant mainstream Montana. The speaker went on to explain his belief that the strength of the buffalo is actually physically embodied by his family and tribal community: “we have eaten the buffalo for centuries and they say part of the DNA is with us, that we have that within our people, and we have all of those values. And we’re still here, you know? We’re still here.” His is a clear expression of a belief in a co-constructed ‘being’ wherein humans assimilate qualities of the buffalo. This affective engagement occurs through both spiritual and bodily practice and, in his telling, results in actual, vital survival of both species.

Interviewees consistently associated feelings of awe with being in the presence of buffalo. Their descriptions implied a strong sense of an interspecies energetics, where the buffalo’s strength and vitality inspires and infuses human observers. In one of the interviewee’s words: “[w]hen we watch them...it says a lot. You feel that there’s the energy. You can’t really write it down. You just kind of have to be there to feel it and see it.” In emphasising not just seeing, but ‘feeling’ the energy of the buffalo, this respondent signals the energetic and affective dimensions of these engagements. Some understand that energy as inherently therapeutic—and emphasise the importance of proximity to buffalo to this dynamic. In the words of one interviewee,

I have had very little contact with them, and it, you know, makes me sad that I don’t get to see them every day. I wish I could. ... [W]hen I do see them it makes you feel so good. It just makes you realize the strength of the buffalo.

Indeed, a serious challenge for the buffalo programme at Fort Peck is creating opportunities for all residents of the region to experience the buffalo in person. An hour or more of driving on rugged dirt roads separates the buffalo ranch from the reservation’s main population centres. Furthermore, the buffalo can be difficult to locate within the ranch’s extensive area. Despite these challenges, teachers and others focused on youth education have worked hard to bring the youth to the buffalo ranch. The buffalo’s potential for healing and teaching surfaced as universal concerns in our interviews. “All youth should be around the buffalo. There’s a healing,” was one simple explanation. Reflecting on one experience with bringing children to the ranch to participate in traditional ceremonies, one educator noted: “...I went to that camp that they had last week and the kids had an opportunity to go to sweat, just reconnecting with the land, having an opportunity to go out for tours to the buffalo. I think that it will resonate with those children.”

These statements imply the concern that many adults at Fort Peck have about the welfare of local children. Fort Peck youth face a host of challenges including under-resourced schools, a crumbling built environment and high rates of substance abuse and mental illness among the adult population. Many participants in the buffalo programme explicitly hope that by connecting with the buffalo through ceremony, youth will acquire necessary resilience and strength to survive this environment. This hope motivates programme leaders to work hard to create opportunities for youth at risk to have opportunities to experience buffalo directly. A key feature of the hoped-for benefits to youth from the buffalo is a heightened sense of relationality and connectedness.

### **Relationality**

Relationality is a core concept influencing engagements with buffalo and acts of buffalo restoration at Fort Peck. This is because relationality is at the foundation of Assiniboine and Sioux belief systems linking buffalo and humans in an ancestral kinship governed by reciprocity. Our interview transcripts suggest three themes in the way that buffalo restoration has engaged or produced relational experiences: 1) buffalo model an idealised reciprocal society; 2) individuals relate to buffalo as teachers or role models; and 3) buffalo enable active expression and honouring of relationality and reciprocity.

To many interviewees, buffalo herd behaviour models and demonstrates a strong sense of relatedness and connectedness. Interviewees frequently referred to kinship expressed in buffalo behaviour and how buffalo social behaviour contrasts with contemporary society at Fort Peck. For example, one interviewee said, “...we can learn from those buffalo ...how to treat one another. ...[H]ow they are is the way we should be.

You know, they're a family and they stay close and they protect one another. But we've become so disconnected." Participants in buffalo restoration are fond of sharing a parable about how buffalo treat injured herd members similar to this one: "when [a buffalo is shot] other buffalo will kind of surround it. And they nudge it like they're trying to help it, pick it up, you know? [T]hey're really helpful towards each other, and protective."

Some in the buffalo programme have explicit goals that the buffalo will act as role models for children exposed to them. One interviewee put it this way:

With the buffalo demonstrating...strength [and] that compassion...with each other. And once those younger children can witness that and experience that, and know that they are Dakota, they are Nakoda, that that's who they are, and that's how they should act, that's how they should conduct themselves. And the buffalo can only be a positive effect to that end, and to that means, to change things in our community, on our reservation.

This strong statement expresses not only total confidence that buffalo model an idealised society marked by compassion and connectedness, but also hope that the youth in the area can assimilate these values through engagements with buffalo. In this ambition, reciprocal restoration of culture-ecology occurs through mimicry and adoption of (perceived) animal behaviours by human society.

And among our interviewees—participants in buffalo restoration primed for transformational engagements with them, there is evidence of attempting to personally assimilate the buffalo model of behaviour. After noting an absence of traditional teachings about buffalo in his upbringing, one interviewee spoke about his efforts to let buffalo serve as models for his own life and actions. First, he related his understandings of traditional ideas about customary social structures, saying that in "generations past, [tribes] kind of mimicked the buffalo in their society structure, you know? The women took care of the children and the men protected them. That was the basic, you know, life structure..." He continued to describe how buffalo inform his own identity and ideas about gender roles:

So I kind of glean a lot of that for myself... just in daily life? I think... what would a buffalo bull do in a certain type situation? ...[N]ot walking around and grunting and stuff like that, but ... just that energy of... who am I as a Dakota and Lakota man, you know? What's my responsibility? And I look at that buffalo, knowing what he does, and so it just kind of gives me a little direction.

To adopt buffalo as role models for personal behaviour and identity is to engage in relationality. Buffalo restoration, through opportunities to observe buffalo and the percolation of buffalo parables and images into daily life, has expanded the feasibility of this kind of relationality for those at Fort Peck who seek it out.

Finally, to many interviewees, the restoration of buffalo to Fort Peck creates a meaningful opportunity to actively affirm the reciprocal relationship linking buffalo and humans.

Speaking of his own sense of responsibility to buffalo, one interviewee said: "I just know that we need to protect them. ...[T]hose are our people. We are them. They are us." This comment is reinforced by another interviewee who noted that "for millennia the buffalo took care of us. Now it's our responsibility to take care of them." Another elaborated on this theme, pointing out how restoration improves the capacity for people of Fort Peck to engage in protocol. With the buffalo living on the reservation, he said, "[n]ow we can go there and tell them we're grateful." Customary expressions of gratitude through prayer, ceremony and song are important means to participating in reciprocal care, means that only became possible through the restoration of buffalo to the reservation.

Together these examples indicate the central role of relationality and reciprocity in the values that interviewees brought to and derive from their engagements with buffalo restoration at Fort Peck. The following discussion of individual recovery and catharsis through experiences with buffalo speaks to the potency of the kinds of affective engagements possible in this cultural framework.

### Life histories of recovery and restoration

The intersection of buffalo restoration with individual recovery emerged as a central motif in our interviews with key participants in the buffalo program at Fort Peck. This pattern is consistent with the linkage developed in our conceptual framework between affective experiences invoking feelings of relationality and increased well-being. In addition, individuals report and demonstrate powerful cathartic experiences, in which, the presence of buffalo is profoundly moving.

A number of the interviews we conducted centered on life histories transformed by the discovery of Sioux or Assiniboine spiritual traditions in adulthood. The (re)discovery of tradition was part of a critical personal recovery: an embrace of sobriety, sometimes indigenous identity, and sometimes both. This usually occurred when an individual returned to the reservation after time away. The time 'away' might have been time spent abusing alcohol or drugs, or actually working or serving in the military in locales far from the reservation. In this narrative, buffalo restoration and the ability to practice a ceremonial relationship to them in close quarters stands out as an episode—perhaps the climactic episode—in a personal odyssey toward well-being, harmony and a sense of connectedness. The point here is that the narrative revolves less around the politics or mechanics of restoring the buffalo to the reservation, but rather around a person being lost and then found. The finding involves connecting to ceremony within their community, and the physical presence of the buffalo is an installment in that reconnection.

The following interview excerpt provides an example of a life history linking individual recovery and buffalo restoration. We have shortened a much longer narrative. The quotation below starts with a response to the question, "When did your understanding of who and what the buffalo are start to change

and who taught you about that?” The speaker is an individual who had worked directly with buffalo management.

Well, I started it's called the 'Red Road of Sobriety' 2000, 1998...I don't keep track of years. I'd say about 15 years ago, ...I was down in the bottom of hole, drank a lot, you know, young and dumb. Drank around, partied around. But [an older family member] said, 'You have to break that cycle of alcoholism. You don't want your kids to drink.'

The interviewee's family members intervened in his substance abuse by bringing him to meet traditionalists from the reservation.

[The traditionalists] used to come over and play cards. It was a gathering and we used to sit around and listen to them talk. ...so they talked about sweat lodges, how the buffalo people help us, how we take care of our families. So kind of gradually I got into it. I kind of had that good feeling, went to sweat, carried in rocks and stuff and listened to them sing. ...

[Then I] went to Bear Butte, and seen the buffalo down there that year. And just kind of hung around camp and carried buffalo robes up, buffalo skulls. And they started introducing me to the buffalo, you know, what the buffalo skull represents on an altar, the robe, you know, the shelters and things like that. So from there I just kind of worked along, went to ceremonies, went to Sun Dances, got really involved in it. And that's...how it started working out.

This speaker transitioned to describing his participation in buffalo management activities. In addition to describing the practicalities of establishing fencing and the like, the speaker reflected on how he came to understand the use of ceremony in engaging with the buffalo by watching and learning from elders. For example, when welcoming a couple of semi-trailers loads of buffalo to the ranch, he followed the lead of tribal elder. The elder chose to approach the new buffalo delicately and as relatives arriving from a long journey, sprinkling the ramp of the semi-trailer (that the animals would walk down) with sage to “comfort their hooves.” Rather than driving the animals out of the trailers with yelling and prodding (a standard way to move cattle), the elder suggested they open the ramp and sit quietly by the trailer smoking tobacco (a sacred act) while the animals took several hours to exit the trailers “just taking their time, smelling the sage.” The elder also chose to wait for all of buffalo to arrive before performing a welcoming ceremony because “he didn't want the herd to be mixed up [i.e. confused]; he wanted them together as one for them to start singing the coming-home ceremonial songs for them... Because they're family, so that's what he did.” In including these descriptions of appropriate ways to engage with buffalo according to spiritual traditions, this speaker demonstrates how his own spiritual/health recovery narrative involved embracing a set of performances focused on affective engagement with the buffalo.

In this narrative, engagement with buffalo is a chapter in a longer story of personal recovery. The recovery involves

reconnection, with cultural traditions and the set of relationships and practices they imply. The “good feeling” this speaker mentions as an outcome of practising ceremonial activities, highlighting the psycho-spiritual and health transformation taking place through these recoveries and reconnection. In this example, the awareness of connectedness that scholars consider fundamental to indigenous mental health is expressed not only in terms of the speaker's growing engagement with a circle of traditionalists, but later in his discussion of his understanding of the appropriate way to engage with buffalo. A motif similar to this, with individual variations, surfaced in about half of our interviews.

Other aspects of personal recovery surface in intensely emotional moments when buffalo evoke grief and cathartic joy simultaneously. Both our transcripts and our observations demonstrate this dynamic. Having been asked about early experiences of learning about buffalo, one interviewee was prompted to share a story about her mother. She prefaced the story by explaining that her mother's parents were from the last generation of people to participate in buffalo hunting as a livelihood; her uncles had been some of the area's last buffalo hunters. She had heard many of their stories, but always regretted not having had the chance to witness the buffalo in person. When the film “Dances with Wolves” came to the reservation, the interviewee's elderly mother was “very, very excited” about the chance to witness a recreation of her uncles' and relatives' livelihoods. Watching her mother in the movie theatre, the interviewee noticed that when the buffalo first came on the screen, her mother started to weep (and here the interviewee started to cry as well, suggesting the potency of the moment). According to the interviewee, her mother's tears expressed the grief of the loss of the buffalo from the culture (“she never got to actually see them, ... she never got to hear ... the sounds the buffalo made”). But when asked, her mother, who eagerly attended the film twice, explained that along with her grief, she also felt profound happiness. The happiness drew from the film's striking depiction of buffalo and buffalo hunting. According to the speaker:

And so I asked her, I said, 'Well, how did you enjoy it?' And she said that she really enjoyed 'being able to hear the thunder of the buffalo running'. And she enjoyed 'listening to how they sounded, that the buffalo were speaking their own language'. ...And she was saying that[,] that movie just really took her there, and it helped her to experience, you know, some of those things that she never got to see, you know, that her uncles saw.

To be clear, what brought the viewer to tears was not the buffalo dying, but the evocative depiction of their physicality—their sounds and action. Here, again, is the affective dimension of the presence of buffalo moving and engaging a human 'becoming.' While this example discusses buffalo witnessed on screen, as participant observers we have witnessed similarly dramatic responses by elders to being in the presence of buffalo. For these elders, the affective experience of being in the presence of buffalo appears to involve tremendous grief

about the past, but also potentially an opportunity for personal catharsis and healing.

Whether buffalo restoration connects to momentary events of catharsis or longer episodes of recovery from disconnectedness, these examples emphasise the transformational potency of buffalo restoration at Fort Peck. These transformational dynamics for individuals are greatly enhanced by the capacity to witness the buffalo in person (and on screen). The resulting affective engagements between buffalo and humans are shaped by cultural beliefs that understand buffalo both as human relatives and as beings who speak and feel in ways aligned with human experience. Taken together, these narratives and examples align with the notion that awareness of connectedness is enhanced through the interspecies connection manifest in buffalo restoration, and that new levels of awareness contribute to therapeutic transformations.

## CONCLUSION

This article provides new insights about the potential benefits of ecological restoration for indigenous communities. Advocates of ecological restoration emphasise the many dimensions of its benefits, including for participants in restoration efforts, but the vast majority of restoration literature focuses on quantifying metrics of ecosystem functionality (Wortley et al. 2013). For this reason, there is little research exploring the cultural, spiritual or psychological contributions of restoration. Using the exemplary case study of the restoration of buffalo by the Sioux and Assiniboine tribes to their Fort Peck reservation, we observe that there are emergent and dynamic processes of “re-connecting” and relating to self, across species, and within community resulting from the restoration of a cultural keystone species to the landscape. We join threads from ideas about cultures of restoration, postcolonial models of mental health among American Indian communities and affective ecologies to establish our claim that these reconnections signal therapeutic outcomes in the broadest sense.

The connections that emerge as outcomes of restoration are well-suited to an affective ecologies framework as they emphasise an integrated dynamic process of ‘becoming’ within an interspecies relationality honoured in Sioux and Assiniboine spiritual traditions. The interviewees described in this article reported experience of joy and awe, catharsis of the past trauma, as well as un-namable ‘energetics’ in the presence of buffalo. They also drew links between the nature of their own cultural survival and that of the buffalo. As the epigraph to this article notes, some observers clearly see in the bison a set of lessons about sharing the burden of life and existence in a communal manner, that the relatives of a fallen buffalo would go to it to help it and that ‘this is how we should be with each other’. A significant contribution of this study is its emphasis on the individual scale of the self as a site for analysis and as a vital component of a larger restoration-recovery narrative.

Above all, this work demonstrates the importance of including and being open to the spiritual realm in research and explorations of affect and relationality in human-environment

interactions. In this case, we document clear evidence of emergent affective ecologies that are embedded in and realized through spiritual customs and world views. In the case of buffalo restoration, the spirit world is a powerful and vital mediator and medium. Restoration benefits, for the Fort Peck people who are experiencing them, play out as much through the spiritual as through the material realm. A clear limitation of this research is that our observations are only applicable to individuals active in the buffalo restoration and programming at Fort Peck. While this group clearly hopes that the kinds of cathartic and beneficial experiences they report will accrue to others, one related point established by our work is that such therapeutic benefits have to date hinged on having access to the buffalo *and* investment in Sioux and Assiniboine spiritual heritage. For these reasons, though, this work also signals a clear opportunity for future research to explore the mechanisms, patterns and qualities of diffusion of the restorative effects of affective ecologies across and within societies engaged in ecological restoration.

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## NOTES

- 1 Ecological restoration is inseparable from cultural and spiritual restoration, and is inseparable from the spiritual responsibilities of care-giving and world-renewal. Collectively and individually, these indigenous spiritual values must be central to the vision of community ecological restoration. Western science and technology, is a limited conceptual and methodological tool—the “head and hands” of restoration implementation. Native spirituality is the “heart” that guides the head and hands. Dennis Martinez, quoted in Kimmerer, page 263.
- 2 Conceptualizing restoration as creating material space for interspecies exchanges of course parallels and complements the ‘posthuman’ turn in social sciences (Castree and Nash, 2006) along with the ample literature in animal and cultural geography sensitive to “biosocial” becomings (Ingold and Palsson, 2014; Buller, 2014a). However, the posthuman is largely a Western preoccupation, with indigenous cosmology having largely escaped the kind of nature/culture dualism scholars now seek to escape. In this paper, our priority is on allowing framings of and sensitivities about affect from both indigenous and Western traditions to inform and communicate with the literature on the outcomes of ecological restoration.
- 3 The acrimony is aptly captured in a cable television documentary hosted by Dan Rather, “Range War.” It aired on AXS tv July 22, 2014.

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