

Walking Behind the Old Women: Sacred Sakha Cow Knowledge in the 21st Century

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Abstract

This article examines the spiritual and utilitarian values of sacred practices related to cow care among rural Sakha of northeastern Siberia, Russia. Founded upon a pre-Soviet animistic belief system, sacred practices relating to cows are not only important to post-Soviet Sakha identity and ethnic revival but also may make a difference in the productivity of a herd and in maintaining social cohesion within households and village communities in a period of continued socio-economic and moral decline. The article also draws parallels with the importance of reinstating the sacred in human-animal relationships globally.

Keywords: sacred belief, indigenous peoples, Viliui Sakha, local knowledge, environmental anthropology, social cohesion

Introduction

When you first tie a calf with a rope, you rub it lightly on their neck and say, “You will be ready and will obey.” You clean the khoton (cow barn)—before the cows come in for the winter—or in the spring before the cows come to the sayylyk (summer barn)—gather the dried kitin (a prickly evergreen shrub with green berries) and burn it and spread the smoke in each of the khoton corners—and sing an algys (prayer) and hang the salama (sacred rope)—it will cleanse and the bad ichchi (spirits) will leave—and feed the fire with food—and you speak to Iyeksit²—who is the cow god protector—like she is our older sister and she helps with the birth of cows—we are trying to keep these traditions now—to bring them back. We feed the fire and talk to Iyeksit and when we work with the calves—somehow it makes it all lighter and helps—it doesn’t get in the way . . . We went with the elders and learned this—walking behind the old women . . .

This is an article about the value of sacred³ animal prac-

tices, like those described in the above quote, in 21st century native villages. Although grounded in the ethnography of one native peoples of northern Russia, the story has lessons for other native peoples and for humanity overall. Even the remotest settlements on earth are not free from the effects of our ever-faster-moving globalized world. Anthropologists doing research in such seemingly “untouched” areas are often perplexed by how outside and inside are meeting, exchanging, transforming, adapting, evolving and, most importantly, what the cultural effects are and will be. Cultural change is a given and a constant. Nothing stays the same nor should it. In the field, social scientists witness both the tenacity of cultural ways and their delicate susceptibility. We find a role in bringing to light certain aspects of a culture under study that our consultants⁴ show us to be vital yet are going unnoticed, and to multiple ends—to draw attention to those aspects within the culture under question, to draw parallels and lessons for our public audiences, and to bring them into scholarly analysis and debate within the academy. The latter is the objective of this article.

Sacred Sakha cow practices may seem trivial in the hub-bub of daily life in the villages where I conduct research, among Viliui Sakha, native agropastoralists of northeastern Siberia, Russia (Figure 1). Many inhabitants appear to care

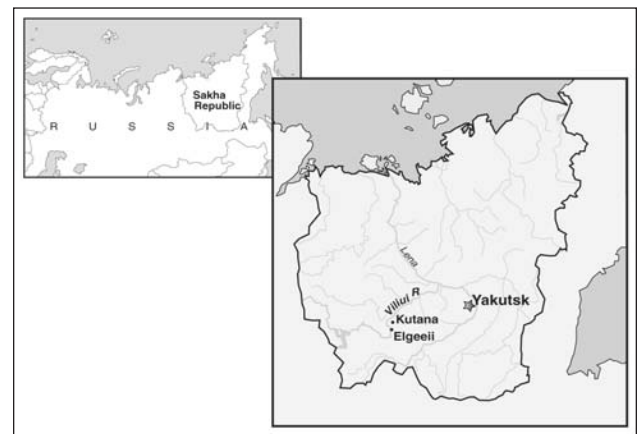


Figure 1. The Sakha Republic within Russia and with the close-up of the Viliui Region

less about these practices since their eyes are more focused on achieving a modern western lifestyle. Additionally, to many academics contemplating how people interact with their cows is anything but of interest. However, I argue the opposite. It is, in fact, because our world is so ever-fast-moving and globalized that sacred practices need to be in the limelight. The reestablishment of the essential relationship that humans have with their environment (including plants, animals, rocks and landscapes) is what is going to bring us back into a more sustainable relationship with the planet.

Conducting research since 1991 in Viliui Sakha villages,⁵ I have witnessed how such sacred Sakha cow practices appear to make a difference in the in situ continuation of ancestral Sakha customs, in harmonic relationships both between cows and intra- and inter-personal household relationships, and in levels of food production. I remember with great clarity the contrasting practices of contemporary cow-keepers while conducting household-level research on post-Soviet food production. Some took the utmost care of their herd while others threw rocks and cursed theirs. In addition to noticing different ways of being with cows, I also started seeing signs of sacred belief, most notably the *salama*, a horse hair rope decorated with cloth and birch bark figures (see Figure 4). I began asking questions about the various practices of contemporary cow-keepers. I was told by many that cows are people with every human attribute except language.

As my eyes and ears became more attentive to the practices of cow-keepers toward their bovine counterparts, I began to notice what seemed to be a correlation between those practices and household-level milk productivity. Furthermore, it appeared that the extent of a sacred human-cow relationship in a given household also correlated to the extent of sacred relationships among household members—households where cow-keepers' practices were orderly, productive units and household cohesion or the level of cooperation and collective identity was high. In short, cows were holding it all together. In households where cow keepers treated their animals poorly, members appeared alienated and household economics were a constant struggle. Therein lies the value of these practices and suggests the potential of them as one means towards bolstering social cohesion in village contexts where socioeconomic and moral decline⁶ are mainstays.

My intention in this article is to take my readers into the sacred world of Viliui Sakha cow keepers to show the apparent links between practice, productivity and household/community-level social cohesion and, in the process, to draw parallels with the importance of reinstating the sacred in human-animal relationships globally. I first take my readers to a contemporary village to comprehend the place of cows in 21st century Viliui Sakha life. I follow with a brief overview

of Sakha sacred cosmology to provide a foundation for the testimonies about contemporary sacred practices that follow. I next analyze the loss, yet subsequent carrying-on, of practices during the Soviet period. I then relate my ethnographic material to the wider literature on sacred cosmologies of human and animal relations and on social cohesion. In conclusion I argue that, because of cows' centrality to Sakha belief and sacred cosmology, they and the sacred practices that accompany them are also essential to maintaining the social cohesion of rural village communities in a period of continued socio-economic and moral decline.

Cows and Daily Life in Viliui Sakha Villages

In Viliui Sakha villages, cows are everywhere—in temperate months they freely roam the streets, exercising their right of way over a milieu of motorcycles with sidecars, pedestrians, occasional cars, and bicycles.⁷ Where there is not a cow, there are cow signs—the ever-growing piles of dung that line the snow-covered streets in winter, the *khotons* with their corrals that consume half of each cow-keeping household's yard, the cow paths that wind through the scraggly spruce, fir, larch, and birch lining the village lanes and the river's banks.

Cow rhythms and cow signs change with the seasons. From late spring through early fall, when there are green fields on the village outskirts to graze, cows follow a daily pasture regime—in the first few hours of morning light they flow in a constant train out of the village to graze for the day and, in a similar processional, return home in the last several hours of evening light. During the subarctic winter they are confined to barns. Their manure piles grow steadily then vanish with spring cleaning. Households incorporate some into their garden plot, but most they haul away to the village dung dump or to the forest at the edge of town. Cow paths also change seasonally—from the muddy, wet paths of spring to the dusty dry of summer to the well-trodden, ice crusted snow paths of winter.

The presence or lack of cows is obvious upon entering a household yard. If a household keeps cows, their yard is dominated by cow space—the *khoton* and adjoining corral. Cow keeping yards also are storage areas for cow fodder, holding at least one and up to five haystacks, positioned by seniority from the *khoton*. All yards, cow-keeping or not, are fenced. Fences act not only to keep dogs and drunks out, but also to keep young newborn calves in and “roaming to pasture” cows out of households' tasty green garden produce and flowers. You will also see many signs of cows inside a cow-keeping house. The first room of most households is an uninsulated entry room. Besides serving as an all-purpose mudroom, this room is where household cow keeper(s) hang their clothes

before entering the house. The room also is used as a meat locker from November to April, when ambient temperatures remain below freezing. It is not uncommon to find several entire cow sides propped against the entry-room walls. In November, freshly slaughtered cow meat, in whole carcass or meal-size portions, is stored here, positioned to move, piece by piece into the household for winter consumption or to be stored for spring and summer use in the household's or nearby kin's *buluus*, an underground storage pit made in the permafrost.

You may also see various internal organs and blood sausage, all Sakha delicacies, that are stored in the entry room until eaten over the winter holidays. The entry room is also a center of milk-processing activities. In the winter months, household members pour excess milk into shallow round pans to freeze for future use or to send to kin in need of milk. Frozen discs of milk can travel to a needy next-door neighbor or as far as students in the capital city, Yakutsk. Sakha also make *bohuuke* (ice cream) in the entry room by dropping tablespoons of whipped cr me fra che sweetened with berry preserves or sugar, onto a flat surface, where it freezes in minutes. In the summer, households often use the entry room for milk separating, butter making, and the manufacture of *kymys* or, since few households hold horses, *bipak* (fermented cow's milk).

All these outward signs of cows are complimented by the Sakhas' sacred understanding of the place of cows in the middle world, a phenomenon today that reflects both a revival and a continued practice of Sakhas' sacred cosmology founded upon animistic and shamanistic practices.

Cows and Sakha Sacred Cosmology

The original Sakha belief is animistic and ascribes all animate and inanimate things with spirit (Maak 1994, 280-297; Seroshevski 1993, 593-655; Jochelson 1933, 103-106; Gogolev 1994). To Sakha, the world is divided into three realms: the *khallaan* (upper), *orto* (middle), and *allaraa* (lower). *Khallaan*, or upper world, is home to the *aiyy* (gods), organized in a nine-tiered pantheon, each level a home to one or more deity protectors. *Urung Aiyy Toion*, creator of the entire universe, inhabits the highest tier. The deities below are manifestations of that essential power. The next most highly regarded is *Juhugey*, who sends horses to people of the middle world (Pekarski 1959[1899], 854), and *Aan Alakhchyn*, the deity of spring and fertility. *Orto Doidu*, the middle world is home to earthly beings and *ichchi* (spirit keepers of nature). Sakha believe that all things animate and inanimate, including trees, rocks, and even words, have *ichchi*. *Ichchi* can be both bad and good. *Allaraa Doidu*, the lower world, is an impassable swamp, inhabited by steel plants and *abaahy* (evil spirits), who represent the source of all existing and potential

evil. *Abaahy* are in constant pursuit of middle world inhabitants. Sakha rely on the *ichchi* and *aiyy* for protection from the *abaahy*, by performing daily and annual rituals.

Sakha also call upon the *oiuun* (shaman), their human mediator of the spirit world and a person born with or indoctrinated into possessing supernatural powers. Sakha have both *urung* (white) and *khara* (black) *oiuun*. The *urung oiuun*'s main role is the benevolent priest who mediates the sky world deities during the *hyakh festival* (summer festival honoring the upper world deities and asking those deities to bring a bounteous summer). The *khara oiuun* can travel throughout the three worlds and utilize the powers of good and evil. They combat illness and bad fate for humans. The *khara oiuun* knows which *abaahy* are the troubling source and his/her soul travels between the three worlds to fight it by their "spirit horse." The *khara oiuun* personifies the horse's rhythmic canter by a *dungur* (shaman drum) and by speaking and singing prayers (Aleksiev 1975, 162). Reaching the lower world, the *oiuun* chases the particular *abaahy* away, healing the ailing person. In the past the *khara oiuun* annually conducted a fall blood sacrifice of horse or cattle to the *abaahy*, a ritual event no longer practiced (Troshanski 1902, 130).

Sakha believe that the horse was the first creation of *Urung Ayii Toion* (Great Lord Master) the highest god of Sakhas' sky pantheon. "In the beginning, god made the horse and from it came the half-man half-horse and from there humans were born" (Seroshevski 1993, 253). The horse was Sakhas' most prized domestic animal and their major source of transportation, food, and clothing materials (Vinokurova 2002). Sakha intricately decorated their riding horses far beyond any utilitarian need, out of their spiritual respect for the animal. The horse accompanied them on all their tasks involving subsistence and was their closest friend. Sakha fulfilled many rituals and traditions to honor their horses. "Colts and horses were, at one time, our gods" and only a second rate spirit did they give a cow; always the rope and pieces of hair used for sacrifice must be from a horse and usually from the mane (Seroshevski 1993, 252). Undoubtedly, these beliefs and traditions were based in Sakhas' Tatar-Mongol origins, the source of all their horse culture.

Up until the 19th century Sakha kept twice as many horses as cattle—but since the late 1800s the opposite has been true (Seroshevski 1993, 250; Maak 1994, 332). Sakha used a local cattle, the *Bos taurus* Sakha (Yakut) breed. It could live outside to temperatures of -50°C , finding the majority of its fodder under the snow. It grazed opportunistically, like a modern goat, utilizing a variety of grasses and other plant materials. It was known to graze in surrounding forestlands and swamps, and to swim across water to reach pasture. The Polish ethnographer Seroshevski, writing in 1896 about

Sakha culture and environment, referred several times to the adaptive qualities of Sakha cattle, “Sakha cattle can stand bad weather, hunger, cold, eat everything (twigs of birch, aspen, willow, cane, and fodder under the snow), eat very little, fatten quickly, and survive for a long time off their own fat reserves” (Seroshevski 1993, 144-149). Sakha also used bulls extensively for transportation, as work animals, and for hunting (Maak 1994, 331).



Figure 2. Fyodor Zakharov with his working bull outside his *Khotyn*

In the Sakha worldview, *Urung Aiyy Toion* created humans equal to horses and the cow came from the water (Seroshevski 1993, 253). “The cow came from the water . . . and that is why Sakha call a pregnant cow “Water-filled cow” “Water-filled with the calf; becomes a cow and calf” (Pekarski 1959, 2999). The important gods and spirit keepers for cows include: “*Suge-Toion-Khara-Begi-Toion*: the god of livestock, that gives colts, calves and children” (Pekarski 1959, 2378). To the ancient Sakha—horse/colts, cows/calves, and humans/children—the one who gives them all is *Suge-Toion-Khara-Begi-Toion*. *Iyeksit* is the god-protector of humans, horses and cows (see endnote 2). *Mangkhal Toion* is the livestock’s common God—he multiplies the herds in the middle world. *Mangkhalin Toion* created the herds. *Inakhsit Khotyn* and *Mangan Mangkhalin* own all calves (Pekarski 1959, 1525). *Mylaadai Khotyn* is the creator of cows—she helps the cows to multiply (Pekarski 1959, 1655). *Yhyn Kyuaar Khotyn* is also a god of herds and the wife of *Mangkhalin Toion* (Pekarski 1959, 1197). There is also note that “In the cow belief, the cow festival is the 11th (24th by the old calendar) of February (Pekarski 1959, 2552; Jochelson 1933, 101). The cows’ middle world spirit/caretaker is *Inakhsyt–Inakhsyt*, the spirit-protector of the horned herds and the one who gives calves. *Inakhsyt toion*, *Inakhsyt khotyn*

means literally “sir and madam-geniuses of the horned herds” (Pekarski 1959, 3798-3799).⁸

Although much of this sacred belief and the practices that accompanied it were banned in the Soviet period due to the oppression of belief, much of it continued ‘underground.’ With the 1991 fall of the Soviet Union, this belief re-emerged and is being revived. Both these dynamics can be observed on a village level.

Sacred Sakha Cow Practices in Contemporary Villages

Before exploring the contemporary status of these sacred practices, I will first provide a brief overview of how cows are kept in post-Soviet Viliui Sakha villages. After the 1991 fall of the Soviet Union and accompanying dissolution of the agro-industrial state farm system that employed and fed most Viliui region households, Viliui Sakha adapted by developing a food production system I term cows-and-kin, keeping cows on a household level and interdepending with kin households for the pooling of products, labor and resources (Crate 2006a, 2003).⁹

Cows-and-kin labor roles tend to be gender and age-specific. The most common pattern is for an elderly household, most often elder parents on pensions, to perform daily cow-care tasks (milking, watering, feeding, mucking) while their younger associated households (usually their children but also other close or far relatives and/or siblings) receive cow products in return for the labor-intensive summer hay cutting (each cow and calf requiring two tons of hay for over-winter fodder). These two general activities, daily cow-care and summer hay cutting, are gender specific.

Daily cow care tasks are mostly performed by elder females with an elder male attending to the more demanding work including slaughter, barn rebuilding, manure management, and leading the herd to water when needed. Haying is also gender-specific. Males perform the beginning step of the haying by first cutting the hay, usually by hand with a scythe but increasingly with tractors, as they are available. Females next do the raking into small stacks, averaging from waist to shoulder high. Males then consolidate these small stacks either into a large stack in the field, to be skidded into town once the first snows have fallen, or directly into a tractor wagon to be hauled and stacked in the household’s yard. All land, including hay land, remains property of the state and households pay a nominal annual fee to use this land for haying.

Not all households keep cows or are involved in a cows-and-kin multiple household relationship. In the four research villages where I have conducted research since 1991, the percentage of households in a given village that keep cows is directly proportional to village population and to access to hay

fields, with smaller villages having a higher percentage and larger villages a lower percentage. An average cow-keeping household keeps two to four milking cows that birth annually. Calves are raised for meat and slaughtered anywhere from three years and up, depending on the cow product needs of the household and their kin. I know of several households who, since the 1991 fall, have gone into full production of meat and milk products for commercial sale. However, these are exceptions to the norm of maintaining subsistence production within a cows-and-kin system.

During summer field research in 2004 and 2005, and part of an elder knowledge initiative of a three year community sustainability project, I interviewed 30 cow-keepers in four villages of the Suntar region of western Sakha, Russia (Crate 2006b, 2006c). My objective was to understand more concretely the relationships between cow-keepers and their cows that I had observed since I began research in these villages in 1991. I found much consistency in my consultants' testimony of sacred Sakha cow practices and have organized it here according to specific categories.¹⁰ To protect my consultants' anonymity, the quotes in the following pages are not identified.

Cows are Like People, They Just Can't Talk

The ethic that all my consultants mentioned at one point in our interview is that cows are just like people in all ways except that they cannot talk. It follows that cows should be treated like humans. In fact, many Sakha talk to their cows and treat them with the same respect due another human being. "You are to keep your cows and have a relationship with them like they are part of your family—talk to them—they understand it all—talk to them as a person and do not get mad—you are not to talk loud and make a fuss—you go peacefully with the cows and love them, pet them—give them a good name and call them by their names." Many of my consultants also acknowledged the consequences of not treating cows like people, "Some now are very mean to their cows and curse at them—that is bad—we don't like it—cows can't talk but they know what is going on and keep it all in their memory. Some young people even fight with their cows. If you do this, the cows don't grow or give milk or do anything—according to the Sakha—"

The respect goes beyond that essential relationship with the animal. You are not only to treat the cows themselves with respect but also their products, "according to the old belief—you need to make their food very well. You need to treat the products they make with respect—you never cut butter with a fork but use either a knife or a spoon. The milk and the cream—you are not to pour to the outside but always to the inside—that is a sin to the products and to the cow to do otherwise."

Establishing a Humane Relationship

To establish this foundational humane relationship you must start when a calf is born. There are various practices to placate the spirits and the God of Cows to ensure a healthy and obedient calf. Most mentioned the need to "have a little talk with *Iyeksit*." "When the cow has a new calf you need to talk to *Iyeksit*. *Iyeksit Khotyn*—I do that and my wife also." In addition, there are various spirits that need to be attended to to ensure a healthy *khoton* environment. The main way that Sakha acknowledge these spirits is by "feeding" them. Food is given to the spirit of the fire, "when a cow gives birth, make *tuptey* (a fire of dry dung and hay) and give food to the fire—the *urung as* (white food considered sacred and including milk, cream, *kymys*, etc.) and horse hair and hang a *salama*—I did this. I learned this from those who raised me who were older and did all this." In addition to *urung as*, most Sakha make *yohakh aladye* (small round pancakes made with *yohakh*, the first colostrum-rich milk that the mother produces after calving) to share with their households and close kin but also to feed the spirits, "When a cow is born, we take the *yohakh aladye* and *ebe* (grandmother) brings them from the house to the *khoton* and we share with the fire—feed it." Although fire was the spirit medium that most consultants mentioned they fed after a calf was born, some described additional practices. "Out of birch we make a little bucket—only big enough for the *aladye*—and hang it on a string made from horse hair." This refers to the ancient Sakha practice of feeding *Iyeksit* when she enters the *khoton* via the *salama* rope during calving (see further on where I discuss *salama* in greater details). One interviewee described another spirit group they attend to when a new calf is born, "when a calf is born, make *yohakh aladye* and feed the corners of the *khoton*—this feeds the *khoton ichchi*."



Figure 3. The Bonding of Cow and Calf

Also important to the correct transition of a calf to life in the middle world is to *sit tahaarar* (to “make a smell”). “The elders say that when a cow is born, to make a smell definitely and so I do that—and take the buttery *aladye* and burn the *kitin* (prickly evergreen shrub with blueish berries)—they do this because from long ago they believed that when a new calf is born that disease could come and the smell cleans the air of those diseases.” Not only does the smell have the power to clean the air of disease but also unwelcome spirits. “When a new calf is born, you need to make a different smell in the *khoton*—you put butter or cream in paper and burn it and spread it about to mix with the calf smell—so the *abaahy* (evil spirits) will not smell the new calf and not know one was born.” This is similar to the smudging practices that many peoples have practiced since early times.¹¹

Indoctrinating a Docile Milk Producer

In addition to the customs for a new calf, most consultants mentioned another set of practices for when a cow gives birth for the first time. The main objective here is to prepare the cow for being an acquiescent milker.

Before the first milking of a cow that births for the first time, I tap the hoofs and horns with the back of an ax so the cow will not butt and kick—then take the itik (instrument used to froth milk made out of a cow horn) and swirl it down the cow’s spine. My ebe taught me this—I didn’t believe and after my first child was born, my ebe came to help and lived with me and at that same time a cow birthed for the first time and ebe did all these things and from then on I have done them also and there IS a difference.

Other accounts refer to how this practice affects the calf. “When a cow gives birth, you tap the mother cow on the horn with the horn part of an *itik* so the newborn is not a rammy cow—doesn’t butt people.” There is also an important part in talking to the cow at the time in the way of making a pact for the future. “When a new cow has their first calf—you hit [the cow] on their horns and heels so they won’t butt and kick—and you sit about half way and say words like “do not butt and do not kick” when you are tapping you do it lightly—not to hurt anyone. Then the cow will be mild. If a cow doesn’t listen, they cut the horns and tie the legs when they are being milked.” This latter comment is interesting in that it sets up the sacred relationship as more of a reciprocal one as opposed to a guarantee, i.e., you need only practice the correct ways and your cows will be docile and compliant. Instead this last remark, “If a cow doesn’t listen, they cut the horns and tie the legs when they are being milked,” suggests that the cow can choose to listen or not despite the cow-keepers best made plans. This emphasizes how Sakha think of cows as people

(can exercise their own free will) but also that abiding by the sacred practices is not a guarantee that certain results will follow. There are also the practices important to when a cow calves their first time which I mentioned earlier in relation to milk productivity.



Figure 4. Lena Yegorova and Olga Trofimova milking in the *Khotyn*

Most of my consultants also talked about the importance of a practice called *sit tahaarar* (literally “to make a smell”) when a household herd moves residence, either at summers end when they no longer go to pasture each day or at summers beginning when they arrive at the *saylyyk*,

You clean the khoton—before the cows come in for the winter—or in the spring before the cows come to the saylyyk—gather the dried kitin and burn it and spread the smoke in each of the khoton corners—it will cleanse and the bad ichchi will leave—

The Sakha use *kitin* as their strong plant for cleansing and in certain occasions, they require the burning of horse hair, “According to our traditions, (when a cow has its first calf) you are to feed the fire and the *khoton* with *aladye*—and burn horse hair to rid of bad spirits.”

Like above, several other consultants mentioned the specific use of horse hair in order to ensure a healthy cow herd but there is an obvious lack of understanding why horse hair, “You put the horse hair in the *tuptey* and the *aladye*—so the cows will grow well—why horse?? I don’t know—it was the tradition. Some old women also put horse hair in the *khoton* roof rafters—it is good for the cows or something.” Horse hair is historically one of Sakhas’ main mediums for their material culture (weavings, hats, switches) and today is known to have healing powers. In the last few years there has been a resurgence of the use of horse

hair—for head caps to relieve a headache, as seat cushions or slippers to bring overall bodily health, for mandalas to bring harmony where they are hung, and the like. Some consultants acknowledged their ancestor's use and sacred respect for horses.

. . . the horse, Juhugey oghoto, from long long ago the Sakha are very respectful—Sakha came up through raising horses—their meat, their kymys is very good for Sakha—tasty—the old Sakha lived off the kymys and the cow sorat and taar—for example—they had no stomach illnesses and were very healthy.

The priority to use horse hair is explained by the Sakha sacred cosmology described earlier. Sakha also have another practice related to animal hair, this one using the tail hair from each cow of their herd. “So that all the cows will go together in the summer time, you cut a piece of each of their tails and wrap them together and put it under the *khoton* door. My *ebe* did this.” Again, many consultants described this practice as something they learned from their ancestors and continue to do with good results. A neighbor of ours in the village told me at length one day about the cow practices she learned from her father. He taught her that each spring, before the cows begin to go to pasture each day, to take a piece of the tail hair of each cow and put it all together under the door threshold to the *khoton*. He said it would keep them all together in their comings and goings and would also ensure that they come home every night. She explained to me that she was having bad luck with her cows—that two had disappeared completely. She remembered her father's advice, abided by it, and has had no problems since.

Successful Transitions to the Upper World

Just as in birth there are specific practices to appease the gods and ensure the health, production, and good nature of a cow, there are practices on the other end—when a cow leaves the middle world through the intentional slaughter for human consumption. All consultants who mentioned practices of the slaughter said it was important to talk well to the cow—to tell them that the slaughter is a decree so humans can use cows as food—to tell them that they are leaving the middle world to reside in the upper world and will meet them there later—to explain that in order to survive, humans need meat through the long winter and not to take offense. One interviewee quoted a saying they use, “If you are going to slaughter an old cow, in the morning you rub their head and tell them that they have fulfilled their life and it is nature's law. You tell them that ‘your hoof prints are drying’ (literal translation meaning there are others coming after you—in your hoof prints—your children and their children. . .).”

I will always remember arriving at a household who had agreed to let me photograph a cow slaughter for my dissertation research and my encounter with the female head of household (women do not do the slaughtering but participate by dealing with the meat, organs and blood as it comes off the body). She had just come out of the *khoton* where she had had conversation with the cow that was to be taken. Her manner was very solemn (this stood out to me since she was normally a very bubbly person). I inquired about the role she played in the taking. She said she had just talked to the cow and assured it that it would go to the upper world and not to be afraid. She now had to lead the rest of the herd away so they would not see the taking.

Consultants were very articulate about their observation of cows in mourning before slaughter.

The older cows know that you are going to slaughter them—they hang their head on the tree and cry lots of tears—they know even if you don't say anything—the ones five or six years of age. There are very smart cows who know everything you are thinking—bulls and cows. If you do something bad to them—they will think about it all the time and never forget.

The cow knows long before you are going to slaughter them that you are planning to—and many times they cry—there are some who even know in the summer that they are going to be killed that fall and they spend the whole summer crying—they know from early—nature tells them—mostly this is the old cows who have lived with you for a long time, when the slaughter time comes around their mood falls to be very bad—they are like people—they move very slowly and they don't listen to you anymore and do the wrong things. Then when the slaughter day comes—they know it and become very weak and passive. They are already not crying—they are already ready and know they will be killed that day.

Sakha practice a ritual of feeding the spirits in thanks during the slaughtering process. Several mentioned the importance of feeding the fire with parts of each of the cow products (meat, organs, blood) and inviting the spirit of the fire to “try some of our cow.”

An old way that was mentioned by several consultants living in villages near lakes was the need to face the cow to the lake when they are hit (Sakha hit a cow on their forehead with the back of an ax to knock them out for slaughter). No one who mentioned this practice could explain why, except for one, “and the cow definitely needs to face the lake when it is hit—because they drank from the lake, ate from the late,

grew from the lake—they are the lake’s children.” The idea here is that by facing them towards the lake, their spirit will then travel back to the lake—their conduit to the upper world.

This relates in many ways to Sakhas’ ancestral explanation for the arrival and departure (both via waterways) of the harsh Siberian winter. Sakha personify winter, the most challenging season for people, in the form of a white bull with blue spots which has huge horns and frosty breath. Called *Jyl Oghuha* (Bull of Winter), he is believed to come every year from the Arctic Ocean and brings with him cold, starvation, need, and struggle. When *Jyl Oghuha* traveled to the spacious Sakha homeland, all in nature froze and the people and animals suffered from the cold. At the end of January, winter reached its peak. The day before the end of January, a mighty eagle arrived from the south, child of the warm sky, he scooped up snow in his nest and let out a loud cry. From the eagle’s cry, *Jyl Oghuha* stepped back and his horns, one by one, fell off, then, as spring approached, his head rolled off. During the ice flows, the trunk of *Jyl Oghuha* swims at the bottom of the Lena to the Arctic Ocean, and the ice flow takes away the spirits of dead people and herds (Ergis 1974, 123-124; Kulakovski 1979, 45-46).

Salama: Making a Way for the Gods

The old women would hang the salama—to the late years of the collective farm. They hung it. The meaning of salama? It is an old belief way—and those who do it believe and those who don’t, don’t—so all will be good and you feed the earth ichchi and hang the salama—in the khoton they hung them and in the big trees—usually birch.

The most ubiquitous visual sign of a household that practices the sacred Sakha cow ways is the presence of *salama*. I had seen many *salama* before—hanging in trees and strung between posts at the annual *yhyakh* festivals. They were always prominently displayed and I knew from my research on the festival that they were symbolic of the pathway for the gods to descend from the upper world and be present at the event. But in 2000, while I was helping with the milking for a household, I noticed for the first time a *salama* hanging, very much out of the reach of human eyes, between the cobweb-filled rafters in a *khoton*. Over our cups of steaming tea I asked my host about what I saw hanging from the *khoton* rafters. She explained that it was *salama* (a sacrificial gift to honor the sky deity-protectors and that serves as their pathway from the sky into the *khoton*). She explained that it is necessary to hang a new one every year when the cows are close to calving to ensure their protection, fertility, and good health. The horse hair string symbolizes power and strength.

The *yaghyya* (miniature birch bark bucket) tied to one end is to place *aladye* in, to keep the gods satiated. We returned to our tea drinking and I thought of how amazing it was that this sacred practice continued after the blatant oppression of ethnic rituals during the Soviet period. Next my mind flooded with all I knew about the other issues of historical change, survival, and adaptation that Sakha have persevered (Crate 2006a, xvii).



Figure 5. *Salama* hanging between the *Khoton* rafters

Salama (in Turkic *jalama* or *chalaba*; in Buriat *zalama*) is a sacred rope usually hung between two birches (considered a sacred tree to many non-Russian Siberian peoples) and decorated with ribbons or rags, skins and ornaments, at the time of offering to the spirit keeper of a place or a domain (Pekarski 1959, 2039). This custom is naturally linked to the Sakha practice of *delbirge* that entails the creation of a shrine to the spirit of a place (Pekarski 1959, 687). These are made at places where Sakha consider a spirit protector to dwell including an unusually growing tree, a comparatively large birch or larch tree, unique outcrops of rocks, and at high passes in the road (however few these are in Viliui due to its flat topography—I have seen a few in the mountains to the south of Yakutsk). In contrast to *salama*, *delbirge* are permanent shrines where passer-bys and visitors have the responsibility to give a gift to the spirit protector to ensure their safe travels and/or hopeful future. Not only in my travels in Sakha, but also when working in Buriatia, Tuva and Mongolia in the late 1980s and early 1990s, I have many times torn a small strip of cloth off my clothing to tie in accordance with this tradition and given rubles, candy, and other offerings. This is a relatively widely practiced custom among Siberian peoples, the parallel Buriat shrine called an *oboo* and Tuvan called *arzhaan* (Humphrey 1998, 378; Levin 2004, 29, 178).

Salama is used in many instances where Sakha appease the upper sky deities because it symbolizes the road those spirits use to enter and exit the middle world. “The upper gods then can come along the *salama* road and come into your *khoton*.” Seroshevski, in his book *The Yakut*, discusses several ways Sakha use the *salama*, both aligning with contemporary explanation that *salama* provides a connection of the upper to the middle worlds. One is a picture of a sacrificial area with *salama* reaching skywards (Seroshevski 1993, 641) and the other is a quote “When Sakha sacrifice cow to sky gods—the *salama* shows the road that the shaman chases the cow up to the sky gods by” (Seroshevski 1993, 622). Sakha hang it in the summer pastures to ensure high milk production and so that the spirits will keep their cows well, they hang it at the *hyakh*. One interviewee mentioned a custom he learned from his *ebe* of hanging *salama* whenever they build a new *khoton* to ensure that the cows had lots of calves and were healthy. He has not lost a calf or had a sick cow since. Like the custom of *sit tahaarar*, it also serves the function of cleansing,

Salama is something that has come through time with our people and as I said, it is used in many situations, when you want the cows to stand well and to multiply, when you want to keep the diseases from coming—and for the hyakh, the old Sakha definitely hung it—our new year is in June—21 and 22—and definitely hang the salama on the birches. The salama hangs loosely and the air blows through it and the salama makes the air good with its moving through it. It cleans it.

When used specifically in the *khoton* it is best known as a way to entice and console the spirit-protectors of the herd, “*Salama’s* purpose is to make the earth and fire spirits and the cow god in the sky happy and joy-filled.” One interviewee commented that their mother hung *salama* so that *Iyeksit* would bless her cows. Similar to *salama’s* power in inviting the benevolent deities, it is also referred to as a practice that keeps the bad spirits and bad consequences away.

Many contemporary Sakha cow-keepers practice sacred ways with their cows that establish a personal and humane relationship, appear to enhance productivity, sanctify the transition of cows into and out of the middle world, and assure the way for essential deities to enter and exit. The fact that they all do not is in part explained by the break with these practices in the Soviet period—a phenomenon shared across the former Soviet Union. In order to understand the contemporary state of these practices, it is necessary to appreciate the historical forces that worked against them.

Lost but not Forgotten: The Soviet Period and Transformation of the Human-Animal Relation

The shift in social basis for kinship groups to kolkhoz [collective farm] groups, while very incomplete, has not resulted in a decline of ritual itself but it has been accompanied (again not invariably by any means) by a general erosion of the religious basis for ritual (Humphrey 1998, 375).

Viliui Sakha and their native counterparts across the former Soviet Union have, to a greater or lesser degree, successfully weathered the transformation of their subsistence practices through collectivization and the atheist doctrine of Soviet ideology. If we take the example of the change in practices of northern subsistence cultures, we see both the effects of collectivization and atheistic processes. With the advent of Soviet collectivization, the economic unit of reindeer herding changed from the extended family with “nomadism as a way of life” to unrelated work brigades with “production nomadism” (Kertulla 2000, 85). Before Sovietization, every animal had a name and a genealogy, which, with production nomadism, was lost (Kertulla 2000, 87). The Soviet state introduced large-scale “monoculture” reindeer herding by importing Russian and Ukrainian specialists who worked to erase the regional and even clan differences in working with the animals (Gray 2004, 145). Although all decisions about herding were then made by farm directors and work rewarded based on a Soviet concept of productive labor and fulfillment of yearly plans, locally the system was flexible enough so Chukchi remained in kin groups, spoke their native language, and used their rules and culturally appropriate ways (Kertulla 2000, 92). Similarly, the Yu’pik, who were traditional sea mammal hunters, were constantly surveilled due to border crossing to perform their hunt and subject to other rules of the Soviet period. However, their activity remained the same and their knowledge of the sea, weather, and behavior of the animals remained distinctly Yup’ik (Kertulla 2000, 93-94).

The Yup’ik, Chukchi and Newcomers were educated in the empirical world of Soviet socialism, but their own cultural beliefs about the way their worlds were constructed continued to hold meaning for them (Kertulla 2000, 80). The extent to which cultural mores and sacred practices remained “in place” is a direct function of the Soviet government’s inability to penetrate the culture, both geographically and culturally. The reindeer-herding Nenets of the Yamal peninsula, because of their remoteness and the integrity of their culture, continue to maintain a form of reindeer pastoralism practiced by their pre-Soviet ancestors (Golovnev and Osherenko 1999,

15). They were subject to the same constraints forbidding the practice of sacred rituals and beliefs as Viliui Sakha were. It was both their ability to move with their herds (and the inconvenience for the Soviet officials to follow them) and the integrity of their culture that brought their sacred practices and belief through to this day.

Viliui Sakha are not that far from the Nenets model of cultural integrity in their human-animal relations. As witnessed in the above testimonies about contemporary sacred practices with cows in Viliui Sakha villages, much is in tact albeit perhaps without the same spiritual grounding as in the past.

The break in continuity of spiritual understanding has its reverberations. Consultants knew well the power of their sacred cow practices but, without the full knowledge of those practices to complete them, were often fearful,

Salama is something that is tied to a lot of traditions and has a lot of meaning and special words you need to say—and I don't do it—I am afraid of it because it is tillaakh-ustaakh (meaning it has a lot of powerful words and meaning connected to it). I saw them hanging when I was a child—at the graves of big (important) people—with all the little birch bark figures—the buckets and calf nose pieces (to keep from milking) and the other birch bark pieces—

They would hang the salama but we were afraid of it and would take it outside—we said it was with abaahy's—but they would bring it back in and hang it back up. They do that so the khoton ichchi would have a present and not do any harm to the cows.

Many of them spoke openly about how the atheistic and communal production principles of the Soviet period worked to dismantle much of the foundation of their sacred system. However, most of the testimony about the Soviet influence showed that many of these practices continued out of sight of the Soviet watch,

They forbid this [salama] in the Soviet period and the old people would do it anyway in secret—I saw it—and they hung salama in the alaas area and would feed the spirits with yogurt and a lot of people would gather together there—the Soviet people—if they saw the salama they would take it—to them there was no such things as belief or abaahy—they would take it and say it was not supposed to be like that. They would take the icons and the orthodox corner religion pieces—that you see in the museum now—and take them away—now it is coming back now. Every time you come and go—you hang it—your ebe¹² did this—for example, on the day that

they would go to the summer house or come back from it, some would leave early and make the tuptey and hang the salama and do all the cleansing and feed the fire with aladye and then they would all come. Every time you hang a new salama so there are more and more each year—in the Soviet times they hid them—I learned it all from the elders who told me about it—I went with them.

The result of the continuation of the practices by the old women and the observation of those practices by their grandchildren (contemporary elders interviewed now) is a deep appreciation for the need to continue the customs they saw but without a true understanding of why they are performing the rituals, “I don't know much—we tried to forget it all in the past time. But what I saw when I was little, I couldn't forget and I got used to doing all those things and do them to this day.” In other words, there is almost a blind faith in practice today—a sense that although there is not a formal school of belief that these practices fall under (although they are more and more being recognized as part of the Sakha's sacred belief called the *Sier Twom*), that these are ways their parents and grandparents practiced and they worked.

One main concern today for most contemporary Viliui Sakha cow-keepers is the transferal of these practices to the next generation. In general, youth know less because of both the past Soviet efforts to ban the practices and the present tendency for youth to not take up cow-keeping nor to practice the old ways if they do.

Although I did not ask specifically about passing these ways along to the next generation, several consultants talked about the need to teach these ways and most importantly, to teach through example—the way it worked for them and how they hope it will work for their children, “When I get older I think about all my folks knew—I remember all that my parents did as I get old. When you are younger you see all this and know it well—then when you get older you do it yourself.” “My son doesn't do any of it—I do it all—maybe they will copy me when I go—who knows. I learned from the old people as an orphan. I try and teach the youth—I correct them if I can.” In the last few years we have been successful in pairing village youth with elders to document elder knowledge (Crate 2006c). Perhaps one promising way to bring more of the sacred Sakha cow practices back is to lead an elder knowledge project specifically focusing on those practices.

Sacred Practices, Productivity and Social Cohesion

To date there is little in the literature that analyzes how local knowledge influences productivity and can even surpass technological advances aimed for the same end result (Wilkes

2005). In interviews on sacred Sakha cow practices, my consultants repeatedly emphasized that how you treat your cows directly affects their production levels.

You need to always have a personal relationship with your cows. You say their name and pet them a lot. Then when you go among them they will not be wild—they will go well. They will give more milk also. When a cow has a new calf you also treat them this way—you name them and pet them so they won't be wild. You need to massage the utters also and use butter or cream on them in the summer so they don't dry up. They will give you a lot of milk if you do the massage to them a lot—and they will not be wild.

Several consultants described a practice to ensure lots of milk from the cow.

My ebe did teach me that when a cow gives birth for the first time, you hit them on the horns and hoofs with the back of the ax and also put buttery aladye in the khoton so the calf will give a lot of milk and meat. We hit the horns and hoofs so the cow will not be wild—will not butt with horns or kick. You also go down their back with the itik—roll it down the back so it will have a lot of milk.

My consultants mentioned the importance of massaging in milk production, “. . . after the birth and before you milk or the baby does, you massage their spine with the *itik*, you pour the warm water on the spine and massage with the *itik* horn. This brings lots of milk. It is a very old Sakha tradition. . .” Likewise many mentioned the importance of *sit tahaarar* when a cow has their first calf, this time with an emphasis of burning horse hair, “when a cow has their first calf, do the *itik* on their back and burn horse hair so they will give milk.”

Although I have not yet done the empirical research comparing the production levels of cow-keeping households that practice the Sakha sacred cow ways and those that don't to support this claim, based upon anecdotal data (17 years in the field and extensive ethnographic research including household surveys with 280 households), my observations confirm this axiom. To illustrate that anecdotal evidence, take the households of the Ivanovs and the Myakymanovs.¹³ The former perform most of the sacred cow practices and demonstrate the “cows are just like humans” ethic described herein. Their herd's production and calf survival levels were the best I witnessed in my survey rounds. Conversely, the Myakymanovs were rough and demanding of their cows, often yelling and throwing rocks at them to shoo them to pasture. The household was in a constant state of poverty and had consistently low milk and meat production. There was also an

air of anger among household members during my visits.

In other words, practicing sacred Sakha cow ways appears to make the difference between not only production and household economics but also the level of harmonious relationships between people and cows and among household members. It is attitudes, perceptions, values, ethics and behaviors that determine the level of stewardship to the environment—both psychological and physical (Leigh 2005, 6). Those parameters also shape the viability of the communities of which households contribute. In the Arctic it is widely understood that cultural integrity is a key determinant of community viability (AHDR 2004). Furthermore, globalization works to diminish the level of social cohesion¹⁴ within a community (Duhaime et al. 2004, 295). Measures to increase cultural integrity can work to counteract those forces.

In addition to increasing cultural integrity, the benefits of increased production and household/community-level social cohesion due to the enactment of sacred Sakha cow practices provide a strong argument for reinstating a wider acceptance and use of those practices. Just like a renewed environmental ethic among Buriat communities, founded on sacred pre-Soviet practices is contributing to positive developments (Metzo 2005), Sakha sacred practices have a similarly advantageous utility in contemporary Viliui Sakha life. With this in mind, our work becomes investigating how a broader understanding and application of sacred human-animal cosmologies prove integral to stabilizing human-environment interactions globally.

Sacred Cosmologies of Human and Animal Relations

. . . Eskimos traditionally viewed themselves as confronted with an originally undifferentiated universe in which the boundaries between the human and nonhuman, the spiritual and material, were shifting and permeable. Moreover, those boundaries, they believed, were not naturally given but depended on human action to keep them in place. The rules for living and ritual activity—both public and private—focused on the construction of boundaries and passages to circumscribe and control the flow of activity within an otherwise undifferentiated universe (Fienup-Riordan 1994, 46).

For most of human history people have maintained an interactive and reciprocal relationship with the natural world like that described in the passage above. It has only been in the recent human past, with the processes of industrialization and globalization, that humans have severed much of their vital

connection to other beings and the environment. The sacred elements of human/animal relationships have long been recognized in the anthropological literature (Berkes 1999; Evans-Pritchard 1940; Ingold 1994; Rappaport 1967). A general axiom is that humans living in a direct and daily dependence on the natural environment understand that they are a part of a larger system and that it is in their best interest to participate in the maintenance and health of that natural system, both on a physical and a spiritual level. Their cosmologies teach that their natural environment is spirit-filled.

If they are hunters, when they hunt and take animals, it is understood that the animals are participants in their same world and are there to be taken based on the amicable relations between human and animal—that the hunter is not a controller or manipulator of their environment but rather is successful to the extent that the world opens up to him or her (Ingold 1994, 12). In reciprocity, they must appeal to the spirits to take the animal.

But how do these elements of the sacred human-animal relationship differ when the animals in question are domesticated? Historically the rise of nomadic pastoralism marked many changes in sacred practice including the meaning of Ursa Major (the great bear constellation which newly was interpreted as the cowlick on the shoulder of a young bull around which the sky revolves), a diminished Mother Earth and rise of the patriarchal control over women, and the change of sacrificial offerings from food for the spirit of the wild animal taken to a tithe with a deity expected to give something back in return (Shepard 1996, 211-213). In the Arctic there was a similar transition when reindeer hunters moved to reindeer pastoralism. Clearly the context of the relationship is changed from one of mutual trust to one of domination; humans control the destiny of their animals once domesticated and there is an interdependence assumed by the relationship (Ingold 1994, 16). However, this does not preclude sacred understandings and interactions.

Much of what we know and understand about the sacred human-animal relationship is based on early anthropological studies. Evans-Pritchard (1940) wrote the treatise on human-cattle sacred world, bringing to light the fact that it is not the humans who control the animals but the cattle who organize the daily schedule for the pastoralist Nuer. “In the ‘bovine idiom’ and the ‘cattle clock’ of the Nuer lay a bridge between practical activity and its cultural construction . . . cattle here were objects *at once* economic and symbolic” (Comaroff and Comaroff 1991, 34). With the rise of cultural ecology and environmental anthropology, practitioners began to underscore the ecological value of human/animal/nature relationships (Rappaport 1967; Netting 1968; 1981; 1993). Later, the field of ethnoecology allowed anthropologists, their collaborators and their audiences to discern Western science’s ignorance

about other peoples’ way of thinking and doing—and instead appreciate how local peoples are experts in the plants, animals and ecosystem resources available to them and have a highly sophisticated way of interacting with these resources to meet their day to day needs (Nazarea 1999, 3-4).

Herding cultures of southern Siberia and Mongolia are known for their sacred human-animal relations. The 2003 film, *The Story of the Weeping Camel*, illustrated beautifully how humans and their herds interdepend. Set in springtime in the Gobi Desert of South Mongolia, a family of nomadic shepherds is at an impasse when a newborn camel is rejected by its mother. They finally summon a musician who serenades the mother camel to tears and to the acceptance of her colt. Similarly, Tuvan Herders use sound and music to influence the behavior of animals but also listen attentively to sounds made by animals, both domestic and wild, as one element of the crucial task of weather forecasting (Levin 2006, 140).

Tibetan nomadic pastoralists resist government directives to treat their animal as commodities and reduce herds accordingly. They consider the taking of a yak a sin and so they consecrate their animals as *tshethar* (meaning “sparing life”) to die a natural death. Reasons include compensating one’s own sins, including selling animals for meat, increasing the store of merit for a person who has been ill and securing religious merit for a deceased household member (Levine 1998, 165).

I remember clearly encountering this way of being with animals in 1991 while visiting some Tuvan herders at their summer yurt. Upon our arrival, the household head killed a sheep, divvied up its parts and prepared a grand feast for us. He explained that this custom showed the intimate relation between herder and herds and also symbolized the animal’s willingness to sacrifice itself for the herder household as a way of showing gratitude for good keeping. He emphasized his dedication to this standing tradition despite the economic hardships of the times. Later that summer at another summer yurt I witnessed the actual taking of the animal and was told it was done according to the tradition taught to them by Ghengis Khan—to not shed a drop of the animal’s blood upon the earth. The practice is to slit the chest, reach inside and squeeze the heart until it stops bleeding.

Sacred practices, when framed as indigenous knowledge (IK), are founded upon a certain cosmology and worldview (Berkes 1999, 53). Without an understanding of the latter, it is difficult to understand why Sakha and their practicing counterparts do what they do. If we attempt to understand their practices based on a dominant Western worldview following the doctrine of the duality of humans and nature and positing humans at the center of the universe with an identity distinct from the rest of nature, they make no sense (Redman 1999, 19). We have much to gain by considering and

supporting the diversity of worldviews and cosmologies that have for millennia “worked” to nurture a mutually-compatible and interdependent relationship between humans and animals.

It is not only atheist ideologies and the cultural effects of modernity and globalization that erode the social fabric to the extent that sacred practices are no longer used. As territories where animals thrive are being reduced or taken in entirety, transformed into agricultural lands, succumbing to irreversible damage due to the local effects of development, deforestation and global climate change, and the like, so go the essential human-animal relationships that are a foundation to cultures. Africa has been in the spotlight in the last decade with controversies over “parks or people” (Beyene 2006; Hitchcock 2003; Igoe 2004). The Arctic has been a proving ground for controversies over territorial encroachment due to mineral, oil and gas development and climate change that threaten animal landscapes (Anderson and Nuttall 2004). “These animals not only sustain indigenous peoples in an economic sense; they provide a fundamental basis for social identity, cultural survival, and spiritual life, which is illustrated by rich mythologies, vivid oral histories, festivals and ceremonies” (Nuttall 2004, 200).

In many ways it is ironic that we need to document and revive a sacred relationship with animals. The fact that we do is telling of the dire situation we are in as humans in our human-nature relationship. Advocates tell us we have much to learn from animals about who we are on the earth and what role we have (Bekoff 2006, 39). Inasmuch as revitalizing sacred Sakha cow knowledge in Viliui Sakha villages will possibly bring about harmony, increase production and increase social cohesion and community viability, advocating and enacting similar measures in other native and world areas should also. It will benefit us all.

Endnotes

1. Author to whom correspondence should be directed: E-mail: scrate1@gmu.edu
2. *Iyeksit* is the God who protects people, horses and cows. The root of the word “iye” means to be in a good mood and underlines the need to be in good spirits when enacting any of the rituals associated with *Iyeksit* or she will not provide and protect.
3. I use the term “sacred” here and not the term “traditional,” for two main reasons. First, because the practices I am describing involve not only the practitioners’ conscious choice to continue a way of being with cows that was passed to them but ultimately are founded in Sakhas’ historically-based contemporary belief system. This in part explains why I do not use the term “traditional,” since it conveys the idea of a static practice and one that is not evolving.
4. I use the term “consultant” to refer to all community members who have contributed to my research.
5. Between 1991 and the present I have conducted Master’s thesis (1992) and dissertation thesis (1999-2000) research, directed two 2-year environmental projects (2004-2007), and was principle investigator for a 3-year NSF project (2003-2005). My methods are mainly qualitative including interviews, oral histories, participant observation, and focus groups. I rely on a combination of my research protocol and local contacts to guide my choice of consultants. I am fluent in both Russian and the local language, Sakha and so I am able to perform these methods myself. When I have used quantitative methods, including surveys and time allocation, I used a random sampling method to choose participants.
6. When I refer to ‘moral decline,’ I am describing the overall loss in community vigor that was present during the ‘good life’ of the Soviet period when most village inhabitants were employed, stores were well-stocked, and social services abundant and free.
7. Cows roam freely in temperate months because during these times they go to and return from pasture daily—often leaving their household at 6 AM and returning at 1 AM. This is also the time of year they need to roam to have access to the several bulls available in their village. Although it is very costly to keep bulls, households with many cows tend to have one and natural insemination is preferred.
8. It is interesting to note that the Sakha word for cow, *ynakh*, comes from the Turkic word *Inak*, which has the Latin root *Inachus* (Pekarski 1959, 3798). Inachus was the river god and the first god of Argos in the Peloponnesus southern Greece. As the story goes, Inachus lost track of his daughter Io. When the daughter returned to her father’s stream, she caught Jupiter’s [Zeus’] eye and Hera disguised Io as a cow to protect her. She saw her own reflection in her father’s river and fled in terror. Still she followed her father and sisters. “Father Inachus himself, twin-horned, leans leftward upon his tilted urn [from which he poured his streams forth]” (Atsma 2007).
9. This is a broad and generalized description of the age and gender roles involved in cow care. For a more detailed description, please see Crate 2006a, 2003.
10. I acknowledge the fact that all my consultants are knowledgeable about the sacred Sakha cow practices and, in that way, are not representative of a cross-section of the population. Having done this initial research, I am now anxious to understand how a more random sample would respond to my set of questions and also what set of values compels certain cow-keepers to treat their animals poorly.
11. Smudging has been used since ancient times by many people as a ceremony of purification—among pre-Christian pagans as well as Catholic and Eastern Orthodox churches, among Hindus and Buddhists as well as Cherokee and Lakota. Called “incense” in some traditions, it can be made of a variety of fragrant plant materials. Native Americans have used their local plants or obtained more exotic materials through trade with tribes of other regions. Among the plants used for smudge are tobacco, sweet grass, calamus, red willow bark, red osier dogwood, cedar needles and sage. This is not culinary sage of the genus *Salvia*, but is one of the species of the genus *Artemisia*, which includes the landscape perennials, silver mound and silver king, as well as sagebrush and mugwort (Heart 2007).
12. *Ebe* is Sakha for ‘grandmother’ and in this case, the consultant is referring to my mother-in-law. I have been married to a Sakha man of Elgeei village since 1995 and we have one daughter, now 12 years

old. This relationship has changed the way I associate with my field site. It is part of my home in addition to being where I conduct research. My marriage has also given me a different status in my research villages, allowing me access that others do not have.

13. I am using pseudonyms here to protect the identity of my consultants. The captions for Figure 2 and Figure 4 contain the actual names of the participants, at the participants' request.
14. Social cohesion is determined by two parameters: 1) access to formal economic and governmental institutions and 2) access to family and community-based, face-to-face relations. For this discussion I am referring to the latter which are further defined as the ties are produced and sustained by an ethos of reciprocity and sharing manifested by the regular exchange of various types of support, including material (e.g., caribou meat and gasoline), emotional, and even spiritual (e.g., celebration of first catch ceremonies, community-wide grieving following the death of an individual) (Duhaime et al 2004, 302).

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