Elder Knowledge and Sustainable Livelihoods in Post-Soviet Russia: Finding Dialogue across the Generations

Susan A. Crate

Abstract. Russia's indigenous peoples have been struggling with economic, environmental, and socio-cultural dislocation since the fall of the Soviet Union in 1991. In northern rural areas, the end of the Soviet Union most often meant the end of agro-industrial state farm operations that employed and fed surrounding rural populations. Most communities adapted to this loss by reinstating some form of pre-Soviet household-level food production based on hunting, fishing, and/or herding. However, mass media, globalization, and modernity challenge the intergenerational knowledge exchange that grounds subsistence practices. Parts of the circumpolar north have been relatively successful in valuing and integrating elder knowledge within their communities. This has not been the case in Russia. This article presents results of an elder knowledge project in northeast Siberia, Russia that shows how rural communities can both document and use elder knowledge to bolster local definitions of sustainability and, at the same time, initiate new modes of communication between village youth and elders.

Introduction

This article discusses one part of a four-village community sustainability research project in northeastern Siberia, Russia. A research assistant and four village assistants collaborated with me on the project from May 2003 to May 2006. The part of the project discussed here focuses on documenting and utilizing elder knowledge to bolster local definitions of sustainability through the active partnership of village youth and elders in an elder knowledge education initiative.

My starkest memory from our 2004 fieldwork season was the excitement level of the eight student assistants and their project leader when our research team arrived in Kutana village, one of our four research villages in the Suntar region of west-

ern Sakha, northeastern Siberia, Russia. In many ways, this warm welcome served as a sure sign that the elder knowledge part of our project was producing results. When we began talking with the students, they shared their many reflections and insights gained from assisting in interviews with village elders. Student comments included: "I had no idea that our elders knew about the topics we study in our Sakha culture classes . . . but they do and it's because they did those things themselves!" (Nurguyanna, age 15)1; "We got to learn about how they had no toys in the stores back then and made their toys themselves—like a ball made out of the hair that the cows shed in spring . . . " (Kolya, age 13); and, "This taught me about how people lived before much better than from a book . . . " (Sargilanna, age 16).

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The thirteen Kutana elders who worked with the students were equally enthused about the project. They commented on how satisfying it was for them both to serve as a source of knowledge and information for their village's young people and to recapture their memories of a pre-Soviet/ early Soviet past that had been denigrated in the Soviet period. At times it was even forbidden to discuss such subjects. There was also consensus among the elders that the act of being able to talk with young people who wanted to listen to them was one of the big missing pieces in their contemporary communities—and that through these communication exchanges, they could begin to reconstruct and strengthen the bonds across the generations.

The project resulted in both the local valuation and integration of elder knowledge into community-level sustainability frames and in new interactions among youth and elders. In this article I present these results. I begin by providing some preliminary background on the Viliui Sakha and the socio-political reality of post-Soviet village life, and by describing the context of our collaborative research project, including methods, sample size, and timeline, and a discussion of the project's main findings. I then give an overview of the ongoing debate over the why, what, how, and who of elder knowledge and how such debate informs arctic research and this project. In conclusion, I argue that, in the context of the many debates inside and outside of academia about exactly how to document and use local knowledge, this project shows how rural communities can both document and use elder knowledge to bolster local definitions of sustainability and at the same time initiate new modes of communication between village youth and elders.

Orientation to Viliui Sakha and Contemporary Life

Since 1991 I have worked with rural Viliui Sakha communities along the Viliui River, western Sakha Republic, northeastern Siberia, Russia. Because of their geographic location and their unique folkloric and linguistic traits, these Sakha are known as "Viliui Sakha." Sakha are Turkic-speaking peoples, whose ancestors migrated from Central Asia to the shores of Lake Baikal, then again north along the Lena during the reign of Genghis Khan. In their new northern home, the majority adapted a southerly horse and cattle subsistence culture to the sub-arctic environment, making them the highest latitude agropastoralists in the contemporary world. The majority of rural Sakha continue to practice horse and cattle breeding for subsistence and for the market.

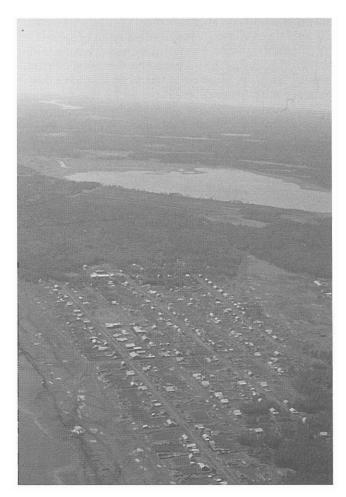


Figure 1. Aerial view of a village showing proximity to natural resources.

The last "century of perestroikas" (Grant 1995) has meant, among other things, huge changes in settlement patterns for Viliui Sakha. In the pre-Soviet period Sakha lived in family-clan clusters scattered across the taiga. In the Soviet time they were consolidated into collectives and later, into state farms. The post-Soviet period brought the dissolution of those state farm enterprises and a move into household-level food production. Villages are typically located near ample water, forests, and fields, the resources necessary for household food production (Fig. 1). There is no running water in the villages but there is electricity and every house has more than one television.

Like most of Russia's indigenous peoples, the Viliui Sakha continue to struggle with economic, environmental, and socio-cultural dislocation since the 1991 fall of the Soviet Union. Unemployment, alcoholism, crime, and homicide are commonplace social ills. In many villages, the end of the Soviet Union has resulted in the dissolution of the agro-industrial state farm operations that

employed and fed surrounding rural populations. To feed themselves, communities have adapted by reinstating some form of pre-Soviet household-level food production—based on hunting, fishing, and/or herding. Most rural Viliui Sakha have developed a household-level cow and horse breeding subsistence system that is founded on an interdependence with extended kin households in order to pool resources (animals, land, labor, and cash), an adaptation I call "cows-and-kin" (Crate 2003). The level of success of the cows-and-kin adaptation is highly dependent on accessing specific local knowledge (Crate 2002).

Mass media, globalization, and modernity, however, challenge the intergenerational knowledge exchange that grounds subsistence practices. Because of the pervasiveness of mass media messages and their emphasis on western consumer culture and modernity, a perceived gap between the generations is accentuated. Similarly, these same forces are drawing youth away from their village communities to pursue a "better life" in the regional centers and capital city, Yakutsk. These trends raise questions about the long-term continuation of the cows-and-kin adaptation and also the future of the villages themselves. For instance, ten years after the break-up of the Soviet Union, some local inhabitants and administrators began promoting the idea of moving towards cowless villages—"Our villages must [be] modern—which means no cows and the addition of hot and cold running water and paved streets" (Victor, age 46). Statements like this one created a fair amount of informal public debate, mostly in the form of discussions around kitchen tables. I began thinking seriously about how these villages would make such a transition—How could they afford to import all their food? Where would they get the funds to install centralized hot and cold water? How could they maintain paved roads in a permafrost area without considerable funding and resources? And, perhaps the query that challenged me most, how could rural Viliui Sakha live without cows—given that, like the Nuer of Africa (Evans-Pritchard 1940), cows are integral to Sakhas' daily life, spiritual culture, and ethnic identity (Crate 2003). These questions prompted me to collaborate with interested inhabitants of the surrounding villages to explore ideas about the future of their village communities.

An Evolving Research Agenda: Background

In May, 2003 I began a three-year research project, "Investigating the Economic and Environmental Resilience of Viliui Sakha Villages: Building Capacity, Assessing Sustainability, Gaining Knowledge" (NSF OPP-0240845), that, among other

issues, explores the future of the cows-and-kin adaptation by asking, is this adaptation temporary as these villages move into some other productive form or is it a long-term mode of subsistence and market production applicable into the future for these villages? The project's main research questions are: How do local populations define "sustainability" based on community goals? How can household and community-level adaptation to economic and environmental change be assessed based on locally determined definitions of sustainability? Can local elder knowledge be used as a community resource to the extent that it underpins local definitions of sustainability to support household and community-level adaptations?

To these ends the project has three interdependent research areas: 1) "Building Capacity," which involves working with inhabitants to develop a local definition of sustainability and to define appropriate measures to assess sustainability on a household and community level; 2) "Assessing Sustainability"—working to gather and analyze both qualitative and quantitative research data based on those measures, and 3) "Gaining Knowledge"—investigating what aspects of village elders' knowledge inform the locally-produced definitions of sustainability (Fig. 2).

The "Gaining Knowledge" part coincided with my 1999–2000 research verifying that elder knowledge was not being actively utilized in Viliui Sakha communities despite its key role in contemporary cows-and-kin adaptation (Crate 2002). During that time I interviewed 54 Viliui Sakha elders about their early lives and, in the process, learned that most were relaying this information to someone (in this case, to me) for the first time. I found their knowledge compelling for several reasons. First, they described a pre-Soviet and early Soviet subsistence lifestyle of extensive horse and cattle keeping within extended kin groupings. The information from this period included a wealth of ecological knowledge for contemporary post-Soviet survival. Second, their stories brought to life the now-abandoned outlying landscapes of dispersed homesteads once inhabited by ancestors of contemporary village inhabitants, who had pastured their cows and haved in the same fields that inhabitants now access. Third, their knowledge was laden with information about change over time including climate change, the transformation of subsistence practices, settlement patterns, human environmental change due to industrial development and over-foraging, and the break of intergenerational continuity. Given the socio-economic turmoil in post-Soviet indigenous communities, elder knowledge appeared to be a valuable local community resource that could be assessed and utilized to the extent that it informed local visions of sustainable futures.

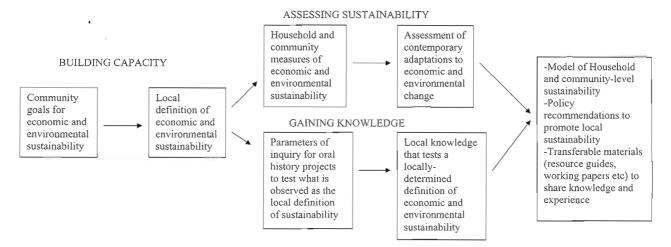


Figure 2. Schematic plan of three year project.

Methods and Timeframes

The four-village study was a collaborative effort involving myself, the US research assistant, Prokopiy Yegorov²—a native Sakha and also my husband, one village research assistant for each of four villages (Lana, Olga, Sargilana, and Vera), and the active participation of village inhabitants (Fig. 3). We used both qualitative and quantitative methods including focus groups, semi-structured interviews, and surveys to define sustainability and to assess contemporary levels of sustainability based on those definitions. In the 2003 summer we held focus groups and administered semi-structured interviews to define sustainability on a community level. To these ends, we first held two six-member focus groups in each of the four villages, one female and one male group with two youth, two middle-age, and two elder participants. In these sessions we first asked focus group participants to write down their ideas about what they needed for a sustainable future. We then, through group process, tallied those ideas, prioritized them, and built upon them through a focused discussion of specific village issues including unemployment, youth delinquency, and hurdles to realizing their visions of sustainability. The focus groups defined four essential building blocks of future sustainability as: 1) to develop diversified village economies, with a focus on utilizing existing human and natural resources—as opposed to importing most goods and jobs, as they do now; 2) to empower the village community, largely by finding common ground for collaboration and cooperation beyond kin associations; 3) to safeguard community health, both by increasing health education and activities and by fighting drug and alcohol abuse in addition to the pollution of lands and waters; and 4) to receive continued state support, especially for starting-up innovative projects related to the development of local diversified economies.

Segueing into the "Gaining Knowledge" Focus

To further flesh out local definitions of sustainability we next conducted semi-structured interviews with five individuals from each age group for a total of 15 inhabitants in each of the four villages, choosing from those who had not participated in the focus groups. We asked specific questions of youth to gauge their attachment to their home village and their desire to stay there or leave, and to assess their thoughts on what their village's elders knew—was it important and worth knowing? The latter segued into the project's "Gaining Knowledge" area and the focus of the present article. We found that an overwhelming 19 out of 20 youth said yes, elder knowledge was important. When we asked them to explain why what their elders knew was important, all 19 mentioned its value as cultural heritage. I am including a few illustrative examples:

We need to tell our children about what our elders told us so they can tell their children. (Grigori, age 18)

To know the local history of our ancestors—know how they lived and where they came from—it is all connected. (Arkadii, age 21)

We need to know how our grandparents lived—how hard it was and how it compares with now. (Lena, age 20)

Several commented that elders' knowledge pertaining to subsistence practices is crucial to their identity as Sakha:

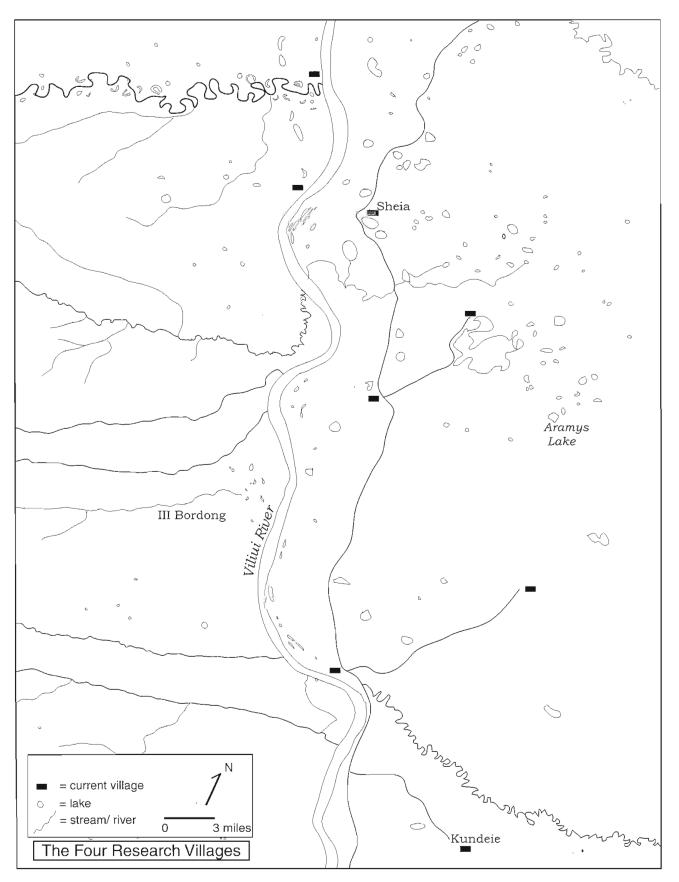


Figure 3. The research villages.

To know how Sakha lived—this a person needs to know if they are Sakha...how they got wood and hay. (Gloria, age 19)

And lastly, several mentioned the need to know the past in order to go forward. For example:

It is interesting to know how they lived—we will progress if we can look back and compare. (Maksime, age 20)

It is important to keep in mind that only two out of the 19 youths who provided these testimonies said that they based their comments on firsthand knowledge gained from interacting with an elder(s) and that the rest learned these talking points in their culture studies class. This drives home the need to develop communication across these generations and also says a lot about the good quality of education these students are receiving.

We then asked the youth to explain how elders' knowledge can be used in today's life, specifically to bolster sustainability, as defined by their local communities. Nineteen out of 20 linked past knowledge with the present need to inform subsistence practices that are founded in Sakhas' ancestral nature belief system. Here are two examples that specifically tie subsistence production to these Sakha beliefs:

They kept animals then—from long ago they have and we do too—the belief was the same then as now—and we still have yhyakh [Sakhas' main ethnic festival, held around the summer solstice and our rituals. (Misha, age 18)

To know about how to keep cows, medicinal plants and how to heal from nature, how to make leather clothes from hunting and domestic animals, to know all the hunting traditions and respectful ways towards *Bayanai* [spirit of hunting], to know the *sier-twom* [Sakha nature belief system] and how to protect nature. (Katya, age 20)

Similarly, most offered examples of historically based building and craft production as ties to contemporary sustainability. Here are two examples,

To know how to build the *sergei* [horse-hitching post], to make fences the old way, to use the hay scythe properly, to make *kymys* [fermented mare's milk] and *chorons* [wooden goblets] and the old time foods. (Anna, age 19)

To know how houses are built, how to make specific crafts—for example, I started wood working by asking elders who knew. (Grigorii, age 19)

Several emphasized the aspects of elder knowledge that they thought bolstered locally defined sustainability, specifically increasing the local capacity to utilize available human and natural resources:

To know how they healed using the medicinal plants—my *ebe* [grandmother] healed this way with *nurguhunnar* [snowdrops]—and my mother uses this recipe now. There are also ways to heal the liver with plants—and bear fat is also medicinal. (Tanya, age 21)

To know how they lived from nature using hay, wood, and forage, and how they lived without electricity. (Zhenia, age 20)

Several also made the link to how elder knowledge can improve their social relations, which contributes to building community, and important aspect of locally-defined sustainability:

To learn *ubastil* [respect for elders]. (Rosa, age 21)

To know the Sakha ways to keep the household together—we are moving away from this. (Motia, age 19)

Our research team next took the youths' responses and consolidated them into a list of specific areas of elder knowledge that the youth had deemed necessary for locally defined sustainability.

Our Goal is to work with elders to learn:

- how they relate to nature and practice the Sakha beliefs
- · how they cook, sew, carve, and smith
- how they hunt, fish, herd, hay, and go on the land
- how they relate to their fellow humans

Please tell us what you know about:

- your ancestral lands and the land where you were born;
- keeping cows and horses—the daily practices and sacred rituals to keep them well;
- hunting, fishing, and foraging—how to harvest from nature and use the resources;
- medicinal plants—which are they, how to harvest and use them for healing;
- raising and teaching children and youth what they need to know and the value of work;
- reading the weather—knowing what the daily and seasonal changes will be;
- methods of having—to harvest well and protect the lands;
- various out buildings—what they are for and how to build them;
- making of Sakha foods—using cow, horse, and forage products;
- ways of living in nature and the daily, seasonal, and annual practices and rituals;
- legends, stories, and people of your village;

Our team decided to call the project "Кырдьа5астан субэтин ыл" [literally, "Take Wisdom from the Elders"] after a Sakha proverb that several youths cited during the interviews. In a preamble, after identifying the participating students and the overall project goals, we framed the reason for appealing to the elders based on the testimony young people had given in interviews:

This summer 20 youth from your and three other adjacent villages said that the way you used to live, the ways you worked the land and kept animals, and all the ways—are important and necessary knowledge for today's life. Therefore, we are collaborating with you to ask about how you lived before in order to learn and use that knowledge and to pass it on to the coming generations.

At the end of summer 2003, we contracted with our village assistants to coordinate this elder knowledge project in their village. We gave them each a tape recorder, batteries, AC adapter, lapel mike, ear phones, and 20 90-minute cassettes. We asked them to interview 13 village elders and to work with their village school to coordinate the participation of 6th to 9th graders to involve more sectors of the communities.

The Results

When we returned to the field in the 2004 summer, we learned that only one of the four village assistants, Lana, had worked with student assistants—the other three had completed and transcribed the 13 interviews on their own. Granted those three had accomplished a significant amount by documenting 13 elders' knowledge in their communities, but, unlike Lana, they did not realize the full potential of the project by involving students. Lana had the advantage of being a full-time culture teacher and director of a dance ensemble at the village school, which gave her a strong bond and a working relationship with the students from the start. Therefore, we could have had greater success in the other villages had we solicited village assistants who, like Lana, had pre-existing relationships with the students.

When we arrived in Kutana village, where Lana had worked with 5th through 9th graders, we were energetically greeted by the youths who had participated—they were full of ideas and excitement about the work they had done. In asking some preliminary questions, we learned that they agreed that the work went very well and that all their parents were equally excited about the project—some parents were discussing it with their children and had begun talking about what they knew of the old life. The student assistants said their favorite part was a mini-expedition they made to Tumul, a settlement of several year-round households about 7 kilometers from Kutana. "We went there by foot and it was a beautiful spring day—stayed overnight with the elders and did the work—part of the time we went to work with elders on our own—we learned a lot" (Oksana, age 13). When asked what the worst part of the

project was, they said that they wanted to put more time into the work but could not because of their other schoolwork. Some of them complained that the transcribing—the writing of what the elders said from the tapes—was tedious for them. Some mentioned difficulties linguistically—they often did not know some of the old Sakha words. We talked about how to write down those words and a little about the context in which they are used, and suggested taking the words and context back to the elder for further explanation. The student assistants recommended that in the future we divide the interview teams by gender so that girls work with the elder women and boys with elder men because they know each other's specialties better.

We asked the student assistants to elaborate on some of the things they had learned. In addition to learning how people had once made their own toys (mentioned at beginning of article), the students described the many rituals and other elements of the Sakha sier-twom that they had learned, such as feeding the earth and saying an algis [a solo sung prayer] when coming to a place for the first time as a way to ask the spirits not to be offended. Several students added that the sier-twom was important today as a means to protect and keep nature and also to maintain good relations with other humans.

The students were clearly impassioned about the project. Perhaps the greatest insight gained was the discovery that their elders possessed first and/or second-hand knowledge of most of the matters now taught in their formal traditional culture classes. Additionally many students came away with the observation that their elders had a much stricter work ethic in the past than in the present—that their lives required it and that perhaps it would be better today if that historically based work ethic was reinstated.

The 13 Kutana elders who worked with the student assistants were just as enthused about the project. Given the downplaying of and outright ban on pre-Soviet life ways during the Soviet period, many elders relayed how cathartic it was for them to revisit those memories and utilize them as a source of knowledge and information for their village's young people. Similarly, the act of interacting with their village 6th to 9th graders spurred nostalgia for how in earlier times Sakha deliberately bonded across the generations to strengthen their communities. Included here are several quotes that underline the elders' main points. The first point was the need to re-instill an environmental ethic in the young people,

We need to teach the upcoming generations about our ways and our land—how to go along the land and what there is—how to go across the land—for example—not to break the graves when you go and don't make fires everywhere and not to pick berries in the old home places. (Nikander, age 67)

A second point was that today's youth need active learning experiences to get them invested in subsistence practices that are key to future sustainability,

When a person goes haying—they can teach how to hay—it is no use to teach by telling with words—so the kids need to go with the people to learn—the same with learning the wood works—need to watch other people—also with making the wood. The problem is youth now don't work alongside their folks—we have worked since we were born—how elders work—we watch and learn as we go—and they correct us—"Why are you doing it that way!" and then they show us—show us how to do things easier. (Matrona, age 72)

A final point was that parents need to take responsibility for teaching their children to practice a spiritual orientation and a strong work ethic,

We elders have kept the beliefs—the youth now need to learn it from their parents and those in their households—the parents are really the ones to teach their children—to work from early in the morning till late in the evening—the youth get up late and already it is hot and they can't work—need to work in the early cool time and the late cool time. And also not to go and break things—life is spirit-filled and we need to live by that and keep it well. The animals are just like people—they just can't talk—they understand what we say. (Vasili, age 69)

An unexpected result of our collaboration, and one that speaks for its wider implications, was that Lana presented her student assistants' participation in this project as part of a larger paper she gave for a Republic-wide pedagogy conference. This was her first academic paper and she framed her discussion around a concept she called "Creative Pedagogy." She described it as an alternative to standard pedagogy, to the extent that its main objective is to help the students understand their surrounding environment (natural, cultural, social, economic, etc.) via participatory interaction with that environment. The presentation stimulated many questions among the teachers and also brought forward the idea that perhaps this type of project could be valuable in other rural village schools within the Sakha Republic.

The Next Project

Although not in our original research plan, we decided to conduct a second winter elder project, due to the enthusiasm and interest of Lana and her Kutana student assistants. At the end of the 2004 field season, we met with the students and they decided the focus for the next project, "Кутана кырдьа5астарын енук ебугэ етехтере уона сирдэрэ-

yorrapa" ("Kutana Elders' Ancestral Birthland Knowledge Project"). They then came up with the new preamble as follows:

From long before our Sakha ancestors lived scattered across the taiga—in clan groupings of households—in order to make use of the resources in nature to breed cows and horses. In the early 20th century, with the coming of the Soviet power and formation of collectives and state farms, this changed—clan groups were brought together with others to work first in small collectives, then in larger and larger and larger. Land areas were abandoned for places closer to communication and transportation.

You, our elders, were born and brought up during this time of change—you have seen many changes. You remember a lot about what life was like before and how the lands were lived on and used. By learning what you know, others can see the now abandoned lands differently—how they come alive with the memories of people who lived there, the formation of their homesteads, traveling routes from place to place, the stories of the people who lived before them and the ways that the land was used and taken care of. Your memories and knowledge of the nearby landscape where you grew up also teaches us about Sakha belief because we learn about how you took care of the land, the respect you had for nature and how to go and live properly.

After creating the preamble, the students delineated the new project goals

- to learn about what contemporary elders know about outlying land areas where they spent all or part of their childhood
- to document that knowledge by tape recording, transcribing, and mapping the land
- to recognize significant areas re: sacred sites, graves, resource bases, and areas of historical value
- to educate the local community about these places and about the elders in our community who know these lands
- to continue to interact with our village elders to learn what they know and become that much wiser ourselves

When we returned to Kutana during our 2005 field season, we learned that Lana and the students had worked with 15 elders, each of whom, in addition to providing verbal testimony, had drawn a map of their birth homestead and surrounding lands. We next met with all the students who had participated and asked them about their reflections on the project. They remarked that by focusing during the past winter on the adjacent land areas, they had increased their understanding of the knowledge the elders had shared the previous year about how their ancestors lived scattered across the land in kin-clan groupings. Several students

went with the more physically able elders to walk the lands as they spoke.

We also visited each elder to ask them about the program. Several commented that in the Soviet period, teachers used to be more actively involved with their students and would regularly take their students out on "expeditions" during which they would learn a lot about the land. Although these outings were more focused on developing physical stamina and not on learning how their ancestral belief was tied to land use practices, they felt it was a loss that contemporary teachers no longer made such outings. Last year when we met with elders to ask them how the project went, they stressed its importance due to the fact that the elders are passing on and with each death much knowledge is lost. This year, with the focus on birthlands, elders emphasized the need to continue the project because the land is not inhabited and being used like it used to be and, with that abandonment, the unique history of the land is not passed on and will eventually be forgotten.

Lastly, we spent the day walking the lands where several of the elders were born and raised. We were four—myself, Lana, Nurguyanna (one student assistant), and Isabella, a local woman whose parents were born in the areas we traveled and who herself spent her life until 5th grade living in the areas. We traversed a 20-mile loop and visited three elder households in their summer homes. Isabella told us the place names of each area we walked in and explained the particular history of the place. By the end of the trek, Nurguyanna had agreed to write several articles for the village and regional paper about the people who inhabited the areas, how they lived, and the ways that their lives inform present-day moves towards village-level sustainability.

Again, it is important to note that many of the students Lana worked with, like the youths interviewed to create the elder knowledge project priorities, had not previously heard the knowledge that their elders now shared, because of the Soviet period denigration and bans on discussions of the pre-Soviet past. Therefore, the central reason for the students' high level of interest in this work is a result of hearing this knowledge for the first time. Several students did comment that they had heard this knowledge before. Their enthusiasm and the heightened interest of all the students was also a result of the interest of outsiders who came and showed interest in elders' knowledge.

The Why, What, How, and Whose of Elder Knowledge

EK, TK, IK, LK, TEK, LEK (Elder Knowledge, Traditional Knowledge, Indigenous Knowledge, Local

Knowledge, Traditional Ecological Knowledge, Local Ecological Knowledge) are a slew of acronyms that the scientific community has generated in the last two decades to refer to knowledge systems discrete from western "ways of knowing." In the last two decades there has been a groundswell-of interest in and focus on what local people know about their environments, cultures, and global change (Abele 1997; Agrawal 1995; Alcorn 1993; Berkes 1999; Freeman 1992; Stillitoe 1998), in part to counter the delocalizing forces of globalization and modernity that fundamentally clash with the situated knowledge of local people (Nuttall 2004:207). These "knowledges" are politically powerful and used to a variety of ends including, bolstering indigenous rights movements, grassroots initiatives for sustainable development and community-based and/or co-management approaches to resource management; protecting pharmaceutically-valuable plants; the verification and substantiation of land claims; for securing access to participation in scientific research; and, finally such knowledge is used to make strong statements about sovereignty and legitimacy in indigenous people's homelands (Cruikshank 2004:17; Davis and Wagner 2003:462; Sejersen 2004a:71). For the Viliui Sakha, the knowledge of their elders is a valuable resource for village-level sustainability efforts.

But what exactly are people referring to when they talk about these knowledges? (I will refer to all these types of knowledge as "TEK" from here on.) One essential premise is that in indigenous or subsistence-based societies, humans are seen as part of the natural world and that proper relations with nature are necessary in order to receive the gifts of nature (sustenance, shelter) and to have proper relations between people, including past and present generations (Alcorn 1993:425). Based on the testimonies of youth and elders, these aspects are evident in Vilui Sakha elder knowledge. Similarly, this world-view contends that all life forms are connected and related, similar to the connectedness and relatedness involved in the social structure of many indigenous clan systems (Pierotti and Wildcat 2000:1333). Definitions of TEK juxtapose it to western science. TEK is place-based with ties to specific physical localities in relation to the largely temporal emphasis of western science. Where western scientific knowledge is generated through controlled experiments to produce generalizable results, TEK comes via long-time experience in a specific place. It is more important to define how we as researchers are approaching the study of TEK than to continue attempting to define TEK itself (Huntington 2005:32).

Much of the appeal of TEK is the grassroots alternative it offers to "top-down" approaches to governance, resource management, social problems, land use, sustainable communities, and the like. TEK is valuable in providing a retrospective

of the lives and land use of earlier inhabitants. It is also powerful and informative to local user groups because of its potentiality, and in this way related to Frank Sejersen's argument that land for local people is both a memoryscape (retrospective) and a visionscape (potentiality) that empowers process and forward-thinking (2004a:83). The documentation and use of Viliui Sakha elder knowledge to inform sustainable futures is one example of this "potentiality."

Attempts to define, document, and reify this alternative way of knowing has generated huge debates within and outside academia. "Implementing" TEK is problematic due to the active in situ nature of the knowledge system. TEK must be demonstrated so that others can see how it is used in practice, but once it is documented and coded, it carries different meaning (Cruikshank 2004:31– 32). TEK is gained by doing and not by researching, writing, or discussing, and similarly, it is transmitted orally and through practice by those who "know" it (Bielawski 2005:951). Because TEK is an ever changing, evolving knowledge system. one that loses its power once extracted from living context; one could argue that it defies documentation. Our project maintained the knowledge in the living context of TEK by integrating it into contemporary efforts towards sustainability.

Even if we succeed in documenting and coding TEK, how do we decide who knows TEK? Doesn't everyone, in some way? Most often the elders of a society are expected to possess this knowledge. Historically speaking, elders held an authoritative role in their societies and preserved the peace, provided leadership, resolved disputes, and possessed great knowledge about cultural ways including subsistence practices (Laugrand 2005:551). However, most contemporary societies, caught up in many of the rapid changes of our modern world, do not privilege elders. Questions remain about what systematic approaches can be used to identify local experts and decide if someone is an "elder" or just "an old person" (David and Wagner 2003; Sejersen 2004b:47). For our purposes, the factor determining "who knows" was an individual's experience in pre- and early Soviet lifeways.

The Place of Tek in the Russian Arctic

Although the Arctic is no longer isolated from the rest of the world, the "wisdom of the elders" and the skills and values that this knowledge founds—courage, tenacity, patience, and focus—remain important and are precisely the characteristics needed to navigate the modern world. (Sheila Watt-Cloutier 2005:xxxvii-xxxviii)

Many innovative cases of using TEK, often in combination with western scientific ways, in comanagement, self-government, and land claims have taken place in the Arctic (Abele 1997; Bielawski 1995; Caulfield 1997; Cruikshank 1998; Feit 1998; Freeman 1998; Nuttall 2000, 1998; Stevenson 1996; Wenzel 1999). Arctic inhabitants face unprecedented challenges in the twenty-first century (ADHR 2004; ACIA 2005) and the valuation and integration of TEK is one part of securing a sustainable future (Nuttall 1998).

In contrast to their circumpolar neighbors, indigenous inhabitants of northern Russia have not yet taken the initiative to document and make use of TEK, due to both the Soviet period "ban" on discussing the past and the economic turmoil of the present. The most severe social problems in these villages are rooted in the disengagement of families concerning the socialization and upbringing of their youth. These are the effects of a Soviet legacy that both farmed children out to boarding schools for education and devalued the knowledge and experience of community elders. Villages need to make greater use of the experience and knowledge of non-professional teachers—people of older generations (Pika 1999:151—152).

There have, to date, been no efforts to document and integrate elder knowledge in post-Soviet indigenous communities (Crate 2002:152). There are oral history projects, but their focus, albeit highly beneficial, is to revitalize endangered languages through local education initiatives (Kasten 1998). Contemporary rural Sakha efforts to preserve the past are geared more towards reviving memory to substantiate claims for ethnic identity (Cruikshank and Argunova 2000:98). In the early post-Soviet years there were ethnic revivals across the FSU as non-Russian native peoples celebrated their ethnic history and language. Today, most of the artifacts and materials of those revivals are housed in regional and village museums. One popular display in Viliui Sakha village museums is the community genealogy exhibit, focusing on the family trees of local families to show, as the Sakha saying goes, "Khantan Khaannaakh, Kimten Kimneekh?" literally, "From where is your blood, from where are your people?" Although these are valuable efforts that have contributed to a local sense of history and belonging, they fail to bring about the more tangible results of stimulating active discussions about a shared past and its meaning in the present and in the future for sustainability of the community. The elder knowledge project described in this article is a novel effort to document and use elder knowledge actively, specifically, to contribute to locally defined communitylevel sustainability.

Concluding Remarks

Amidst the cacophony of debates about the what, why, and who of IK, EK, LK, and TEK—the "Take Advice from the Elders" project with Viliui Sakha

provides one example of how elder knowledge can be valued and integrated into contemporary life. The project is successful because it frames elder knowledge as one of the integral parts of the community's vision towards a sustainable future. In this context, the what, why, and by whom are clear. In addition, it also brings the community into active information exchange across the generations, promising a renewed sense of identity for the community as a whole and for the various elders and young people involved.

Rural inhabitants of northern Russia are by no means alone in their continual efforts to maintain their historically based communities, while also integrating the modern world and western consumer ways into their lives. This is a struggle known to many of their rural counterparts across the globe. Unlike many of their counterparts, Russia's inhabitants have yet to deliberately initiate efforts to revive and reify the knowledge of their elders that can inform the future. In this context and in reference to the many debates inside and outside of academia about exactly how to document and use local knowledge, this project shows how rural communities can both document and use elder knowledge to bolster local definitions of sustainability and, at the same time, initiate new modes of communication between village youth and elders.

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References

Abele, F.

1997 Traditional Knowledge in Practice. Arctic 50(4): iii-iv.

ACIA

2005 Arctic Climate Impact Assessment. Cambridge: University of Cambridge Press.

AHDR

2004 Arctic Human Development Report. Akureyri: Stefansson Arctic Institute. Agrawal, Arun

1995 Dismantling the Divide between the Indigenous and Scientific Knowledge. Development and Change 26(3):413–419.

Alcorn, Janis

1993 Indigenous Peoples and Conservation. Conservation Biology 7(2):424–426.

Berkes, Fikret

1999 Sacred Ecology: Traditional Ecological Knowledge and Resource Management. Philadelphia: Taylor and Frances.

Bielawski, Ellen

2005 Indigenous Knowledge. In Encyclopedia of the Arctic, vol 2. Mark Nuttall, ed. Pp. 950–955. New York: Routledge.

1995 Inuit Indigenous Knowledge and Science in the Arctic. In Human Ecology and Climate Change: People and Resources in the Far North. D. L. Peterson and D. R. Johnson, eds. Bristol: Taylor and Frances.

Caulfield, Richard

1997 Greenlanders, Whales, and Whaling: Sustainability and Self-Determination in the Arctic. Hanover: University Press of New England.

Crate, Susan A.

2003 Viliui Sakha Post-Soviet Adaptation: A Subarctic Test of Netting's Smallholder Theory. Human Ecology 31(4):499–528.

Viliui Sakha Oral History: The Key to Contemporary Household Survival. Arctic Anthropology 39(1):134–154.

Cruikshank, Julie

2004 Uses and Abuses of Traditional Knowledge: Perspectives from the Yukon Territory. *In* Cultivating Arctic Landscapes. David G. Anderson and Mark Nuttall, eds. Pp. 17–32. New York: Berghahn Books.

1998 The Social Life of Stories: Narrative and Knowledge in the Yukon Territory. Lincoln: University of Nebraska Press.

Cruikshank, Julie and Tatiana Argunova

2000 Reinscribing Meaning: Memory and Indigenous Identity in Sakha Republic, Yakutia. Arctic Anthropology 37(1):96–119.

Davis, Anthony and John Wagner

2003 Who Knows? On the Importance of Identifying "Experts" When Researching Local Ecological Knowledge. Human Ecology 31(3): 463–489.

Evans-Pritchard, Edward E.

1940 The Nuer. Oxford: Clarendon Press.

Feit, Harvey A.

1998 Reflections on Local Knowledge and Institutionalized Resource Management: Differences, Dominance, and Decentralization. *In* Aboriginal Environmental Knowledge in the North. Louis-Jacques Dorais, M. Nagy, and L. Muller-Wille, eds. Pp 123–148. Quebec: GETIC, Université Laval.

Freeman, Milton

1998 Inuit, Whaling, and Sustainability. Walnut Creek: Altamira Press.

1992 The Nature and Utility of Traditional Ecological Knowledge. Northern Perspectives 20(1):9–12.

Grant, Bruce

1995 In the Soviet House of Culture. Princeton: Princeton University Press.

Huntington, Henry

2005 "We Dance Around a Ring and Suppose": Academic Engagement with Traditional Knowledge.
Arctic Anthropology 42(1):29–32.

Kasten, Erich

1998 Bicultural Education in the North: Ways of Preserving and Enhancing Indigenous Peoples' Languages and Traditional Knowledge. Münster, New York: Waxmann.

Laugrand, Frederic

2005 Elders. *In* Encyclopedia of the Arctic, vol 2. Mark Nuttall, ed. Pp. 551–552. New York: Routledge.

Nuttall, Mark

2004 Epilogue: Cultivating Arctic Landscapes In Cultivating Arctic Landscapes. David G. Anderson and Mark Nuttall, eds. Pp. 200–209. New York: Berghahn Books.

2000 Indigenous Peoples' Organizations and Arctic Environmental Co-operation. In Mark Nuttall and Terry Callaghan, eds. Pp. 621–637. The Arctic: Environment, People, Policy. Amsterdam: Harwood Academic Publishers.

1998 Protecting the Arctic: Indigenous Peoples and Cultural Survival. Amsterdam: Harwood Academic Publishers.

Pierotti, Raymond and Daniel Wildcat

2000 Traditional Ecological Knowledge: The Third Alternative (Commentary). Ecological Applications 10(5):1333-1340.

Pika, Aleksandr, ed.

1999 Neotraditionalism in the Russian North. Seattle: University of Washington Press.

Sejersen, Frank

2004a Horizons of Sustainability in Greenland: Inuit Landscapes of Memory and Vision. Arctic Anthropology 41(1):71–89.

2004b Local Knowledge in Greenland: Arctic Perspectives and Contextual Differences, In Cultivating Arctic Landscapes. David G. Anderson and Mark Nuttall, eds. Pp 33–56. New York: Berghahn Books.

Stevenson, Mark

1996 Indigenous Knowledge and Environmental Assessment. Arctic 49(3):278–291.

Stillitoe, Paul

1998 The Development of Indigenous Knowledge: A New Applied Anthropology. Current Anthropology 39(2):223-252.

Watt-Cloutier, Sheila

2005 Preface. *In* Encyclopedia of the Arctic, vol 2. Mark Nuttall, ed. Pp. xxxvii—xxxviii. New York: Routledge.

Wenzel. George

1999 Traditional Ecological Knowledge and Inuit: Reflections on TEK Research and Ethics. Arctic 52(2):113–124.

Endnotes

- 1. Throughout this article I do not use my consultants' real names but rather pseudonyms to preserve their anonymity. Ages are accurate.
- 2. This is not a pseudonym.