

# BIOREGIONS BULLETIN

Spring 2005

Volume 1, Issue 1

*"Like the rest of the world,  
Mongolia is being affected by the cultural,  
environmental, and economic changes of other countries.  
The Mongolian khey— a symbol of interconnectedness—  
represents more than the connection between life and death.  
Today, it begins to symbolize the shrinking planet.  
As Mongolia grows in numbers,  
as tourists and travelers discover its breathtaking landscape  
and rich lifestyles,  
as the neighboring countries become closer via satellite,  
Mongolia will be at her dawn of discovery.  
Possibilities abound for Mongolia's development, but  
success will require careful use of natural resources like  
water and grasslands, long-term planning for sustainability  
of culture and lifestyles, and serious investment into the  
education, health, and welfare of all people."*

*Kelly Pohl, student participant, 1998*

## BIOREGIONS INTERNATIONAL

*~ helping communities build a sustainable future ~*

*\* Research through BioRegions Program, Montana State University  
\* Application through BioRegions Program Inc, Bozeman, Montana*

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### VISION

*We envision communities in balance with their environment. We believe people can  
blend local knowledge and science to foster a balance of environmental quality,  
cultural integrity, and economic sufficiency.*

### CONTACT US!

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Dear Friends of BioRegions,

"Shine jiliin mend hurgeye!" Or in other words, a belated happy Tsagaan Sar – Mongolian New Year – to you!

As a young and growing organization, we have much to do. It is an exciting time: BioRegions International has gained independent non-profit status, hired a part-time program director, and initiated innovative long-term projects in the Darhad Valley, our main activity site in Mongolia. Our partnership with Montana State University remains integral to our work, and enhances BioRegions' ability to promote sustainability and support people working to sustain their communities – be they students from MSU or artisans from Renchinlhumbe, Mongolia.

I am delighted by our progress, and wish to highlight a few recent successes.

On the research front, we are proud of Teki Tsagaan Sankey's 2004 accomplishments in finishing her Darhad Valley field work and passing her Ph.D. oral exams. She is now writing her dissertation, and has several manuscripts in preparation for submission to peer reviewed journals.

In addition, we are exploring several research partnerships, including a research relationship with the Mongolian State University of Agriculture and a large farm near UlaanBaatar, the capital of Mongolia. The MSU BioRegions research team has also prepared a research plan to define and actualize the bioregional wealth profile in the Greater Yellowstone Ecosystem and in the Darhad Valley. We recently submitted this proposal to the National Science Foundation. Finally, affiliate Rebecca Sullivan, Esq., completed a useful paper on the status of bioprospecting in the Greater Yellowstone Ecosystem (GYE) and in Mongolia. Rebecca's paper shows the importance of identifying and shepherding unique biological resources in culturally sensitive ways.

Our Japan contacts continue, but at a reduced level. Professor Nakamura from Hokkaido University visited the Centennial Valley in September. Professor Masami Kaneko, a GIS specialist from Rakuno University, just outside Sapporo, visited our program in Bozeman in February. He is interested in participating, with his students, in comparative research between Hokkaido's Shiretoko National Park and the GYE. He brought two

students to scope out possibilities of attending MSU. Dr. Natsuko Hamamura, a Postdoctoral Research Associate at MSU from Chiba Prefecture, Japan, is going to analyze the DNA and microbial life associated with the 'salty plant' which Darhad Valley herders tell us is an important supplement for both human and livestock health. Dr. Hamamura plans to become increasingly involved in BioRegions activities in Bozeman and in Mongolia.

On the service front, over the past year, Kate Burnaby Wright, Program Director for BioRegions International, has gracefully facilitated steps to move our organization forward. Kate has helped craft a statement defining our vision, a clear work plan, and the infrastructure needed to support our projects in Mongolia. A new Board of Directors is gearing up to assist us in growing, and we are focusing fundraising efforts to meet necessary program expenditures. All are critical components for increasing the long-term impact and sustainability of our work.

In 2005, we look forward to expanding our programs. **Dave Tarby**, graduate of MSU and participant in our 2004 Mongolian expedition, is collaborating with the **Mongolian Red Cross** in offering first aid training for people in countryside communities (bags). Our working relationship with the **Renchinlumbe School** continues: we are collaborating with Bozeman's **Sunrise Rotary Club** to repair and expand the library's

solar power system, and a new relationship with Wyoming-based **Conservation Ink** will build from BioRegions' long-standing student art contest to promote nature and culture through publishing the artwork of Mongolian children. Board member **Wayne Poulsen**, participant in the 2001 and 2004 expeditions, has played an invaluable role designing BioRegions new Sustaining Artisans program, a program we look forward to expanding in 2005. **Christine Sommers Austin** provided vital logistical support for this program from Bozeman, and **Boojum Expeditions** continues to provide a valuable sounding board for our work in Mongolia. Working with former participants **Amy and Ryan Archer**, BioRegions also plans to establish a modest scholarship program to support Mongolian university students who have been affiliated with BioRegions.

I hope you'll enjoy this first issue of *BioRegions Bulletin*, a newsletter with information about upcoming events and articles describing BioRegions' work. Let us know what you think – BioRegions is built from the involvement of many, and we look forward to hearing from you!

Sincerely,  
*Cliff Montagne*



### Person to Person

*BioRegions is lucky to be able to offer assistance person to person, building relationships at the community level. The strength of our programs builds from this foundation of trust and friendship.*

Uugangii lost his legs as a child, when he ran away from the Renchinlumbe Boarding School to follow his family to their winter camp. The weather was bitterly cold, and by the time a herder found and rescued Uugangii, he had suffered severe frostbite in his hands and legs. Since then, despite missing fingers and other challenges, Uugangii has become an accomplished metal-worker and carpenter. In 2004, BioRegions International and Boojum Expeditions worked together to purchase a new pair of prosthetic legs for Uugangii. Here, you can see the difference!

There is a downside to the solid new legs, however, as Boojum Expeditions notes in their newsletter. Uugangii is taller now, and he keeps hitting his head on the ger doorframe as he enters his home!

*Thanks to Boojum Expeditions for these photographs!*  
[www.boojum.com](http://www.boojum.com)

# Student Research Experience in Mongolia

by Jason Leppi

“What are your plans for the summer?” a friend asked me as spring semester came to a close at Montana State University. “Well... I’m heading to Mongolia to help with a research project,” I answered. The look on his face seemed confused, as if I had just spoken in another language. “Where is that place again?” At that point, I knew that he had no clue where Mongolia was – perhaps somewhere in the tropics. In fact most Americans know very little, if anything, about Mongolia and its culture.

From late May until early July, I – along with two other students from MSU – traveled to the Darhad Valley in northern Mongolia to help with Teki’s Tsaagan Sankey’s Ph. D. research. Originally, I expected to learn a ton about ecology and see a lot of scenery within a unique country, but it ended up being so much more. It was a life changing experience.

We spent our days working on Teki’s project setting up transects, coring trees and classifying soil pits, which was a lot of hard work. Almost every day we were blessed by the presence of interested locals, from children to old wise herders. Some would just walk by and stare, others would come and ask questions and leave, and every so often a select few would spend hours or even the day observing. Who wouldn’t be curious? Five strangers near your spring grazing camp, sticking orange flags everywhere and drilling holes within the Siberian larch trees near the edge of the forest. When herders would hang out with us as we went about our daily tree coring routine, we would try our Mongolian, but most of the time got only confused looks from them.

After the work day, it was time to explore the countryside. I found myself going for long hikes exploring the countryside after dinner. Along the way, I saw shamanist oovoo’s, beautiful sunsets, and unique flora; I fly fished some amazing rivers and was able to interact with herders on a more personal level.



## **Teki Tsaagan Sankey**

studies dendrochronology in the Department of Land Resources & Environmental Sciences at Montana State University, Bozeman. During the summer of 2004, she and her husband travelled with three undergraduate students from MSU to the Darhad Valley, Mongolia to complete her Ph.D. field research. The research examines tree regeneration and the recruitment process under grazing disturbance and explores responses in ecotone shift to grazing at fine scales of individual trees and seedlings as well as the landscape scale of an entire ecotone. Four questions are of primary interest.

- 1) Is the lower forest-grassland ecotone shifting?
- 2) Do different grazing levels lead to different rates of ecotone shift?
- 3) Within the same grazing level, do the differences in species and abiotic factors lead to different rates of ecotone shift?
- 4) Could these trends be unified in a single continuous model?

*Editors’ note: We are excited to announce that in November, Teki successfully defended her thesis! She is now ABD (all but dissertation), and energetically pursuing graduation.*

As a research group that moved camp almost every week, we fit in well with the nomadic culture of the Darhad Valley. And while moving sites, despite flooded rivers that occasionally trapped our Russian jeep, we also took time off to explore the valley further away from our camps. I admit, spending 8 hours a day on your knees coring trees was fun, but it was our days off that I really looked forward to. During these times, we rode horse back up to the northern part of the valley, explored the Hordil Saridag Mountain Range, experienced Nadaam (a traditional Mongolian festival), saw Lake Hovsgol and the surrounding area, and – most importantly – interacted with local herders.

Being in Mongolia and having the opportunity to experience a way of life so unique compared to the rest of the world has changed my life forever. It seems so easy today for one to think that the center of the universe is right where that person is at that moment, and that everyone lives the same way we do. This is not true, of course, and I believe that traveling to other countries and experiencing new cultures really does change a person forever.



*“We see an incredible magic being unleashed. It is inviting individuals, communities, national and world members to share the vision of greater purpose, to change and transform the lens through which they see the world.*

*It is a hidden magic that is integral in the people and the voices that are Bioneers, a magic whose potential lies in individuals, communities, networks, and neighborhoods.*

*The magic is a hearty concoction of rounded optimism, vision and practicality, the balance of chaos and order, the transformational power of stories, and the exquisite sense of relationship.”*

– Abigail Porter, co-producer  
Northern Rockies Bioneers Conference (NRBC)



## Supporting Local Efforts to Promote Sustainability

by Abigail Porter

In 2004, BioRegions International provided fiscal sponsorship to the Northern Rockies Bioneers, a local grassroots effort to increase awareness and commitment to sustainability. This group's capstone event, the annual Northern Rockies Bioneers Conference, drew a spectacular crowd – three times the turnout of their first conference, in 2003.

The Northern Rockies Bioneers Conference (NRBC) provides an opportunity for community members in the Yellowstone region and beyond to participate in the National Bioneers Conference. This event is the pre-eminent gathering of environmental visionaries promoting practical solutions for our most pressing environmental and social crises. Held annually for the past 15 years in San Rafael, California, the national conference provides a forum for biological pioneers who peer deeply into the heart of nature to devise strategies for restoration. “Such strategies are destined to become mainstream enterprise in years ahead,” stated Kenny Ausubel, national conference founder.

“I so appreciate what you’ve done with bringing Bioneers to Montana,” Jim Barngrover, owner of Café Mam, commented. “This is a great event that I look forward to. The people, program, information, and outrageous food are very much appreciated... and you’ve got a great staff and volunteers!”

The 2<sup>nd</sup> Annual NRBC took place October 15-17, 2004 at the Emerson Center for the Arts and Culture in Bozeman. Simultaneously, fourteen other satellite sites – in cities such as Boulder, CO; Traverse City, MI; Bloomington, IN; and Anchorage, AK – hosted similar events. “This magic, or cultural force, that Bioneers has become is spreading its mycelial web of practical solutions and social energy to communities across the globe,” wrote one attendee.

Building from the understanding that music, arts, and activism act as interdependent movements, NRBC is unique in the emphasis it places on celebrating and supporting music and arts. “We strive to create lasting relationships, memories, and restorative visions in the Northern Rockies bioregion,” noted Sam Porter, NRBC’s co-producer. NRBC seeks to bring together progressive communities and provide resources, tools, and inspiration to build a sustainable, culturally rich, active, and well-networked community.

Gathering leaders from Montana, Wyoming, North and South Dakota, and Idaho, NRBC attracted more than 200 participants in 2003 and grew to 600 in 2004. The conference has established relationships with a broad demographic, including farmers and ranchers, environmental activists, business people, artists, and concerned individuals. NRBC welcomes any community member who is interested in having a “gathering place” for their common ground ideas to be put into action, building alliances, initiating new grassroots movements, and sharing innovative ideas. The reception from communities near and far was extremely positive, with participants from as far as the far reaches of Alaska!

In 2004, NRBC brought together incredible talent. Musicians included Bozeman’s own Stormy Creek, the Duhks, and museologist Joe Craven. Live satellite feed allowed local audience members to hear – simultaneously with people in 15 other regions – speakers such as Terry Tempest Williams, Amy Goodman, John Mohawk, and Lateefah Simon. Local workshop leaders included Jeff Milchen, Richard Manning, Dr. Henrietta Mann, and Larry Evans; in addition, a great medley of regional organizations and businesses gathered in the Emerson Ballroom to exhibit products and activities that support sustainability.



Adding to conference energy was an *art infusion* of decorated bicycles, built by a variety of Montana State University departments, students, and locals, which were scattered throughout the Emerson. Juried art exhibit *Got Water?* also added a wide range of artistic interpretations. And throughout the weekend, participants were able to sit down together over delicious, life-giving foods provided by 20 local farms.



“We were all energized to be a part of Bioneers in Bozeman and want to acknowledge the creativity, hard work, cooperation and thoughtfulness you put into making an extremely successful weekend for us all,” wrote Sandy Shuptrine, coordinator of Greater Yellowstone/Teton Clean Cities Coalition.

The Northern Rockies Bioneers Conference is proud to have BioRegions International as their fiscal sponsor and proud to share similar visions of helping communities build a sustainable future. NRBC is excited to be working with them again as we prepare for the 2005 Northern Rockies Bioneers Conference, taking place October 14, 15, & 16.



For more information on Northern Rockies Bioneers, visit [www.bioneers.org](http://www.bioneers.org) or [www.porterhouseproductions.com](http://www.porterhouseproductions.com)

# Deerstones: Ancient Art on the Steppe

by Dave Tarby

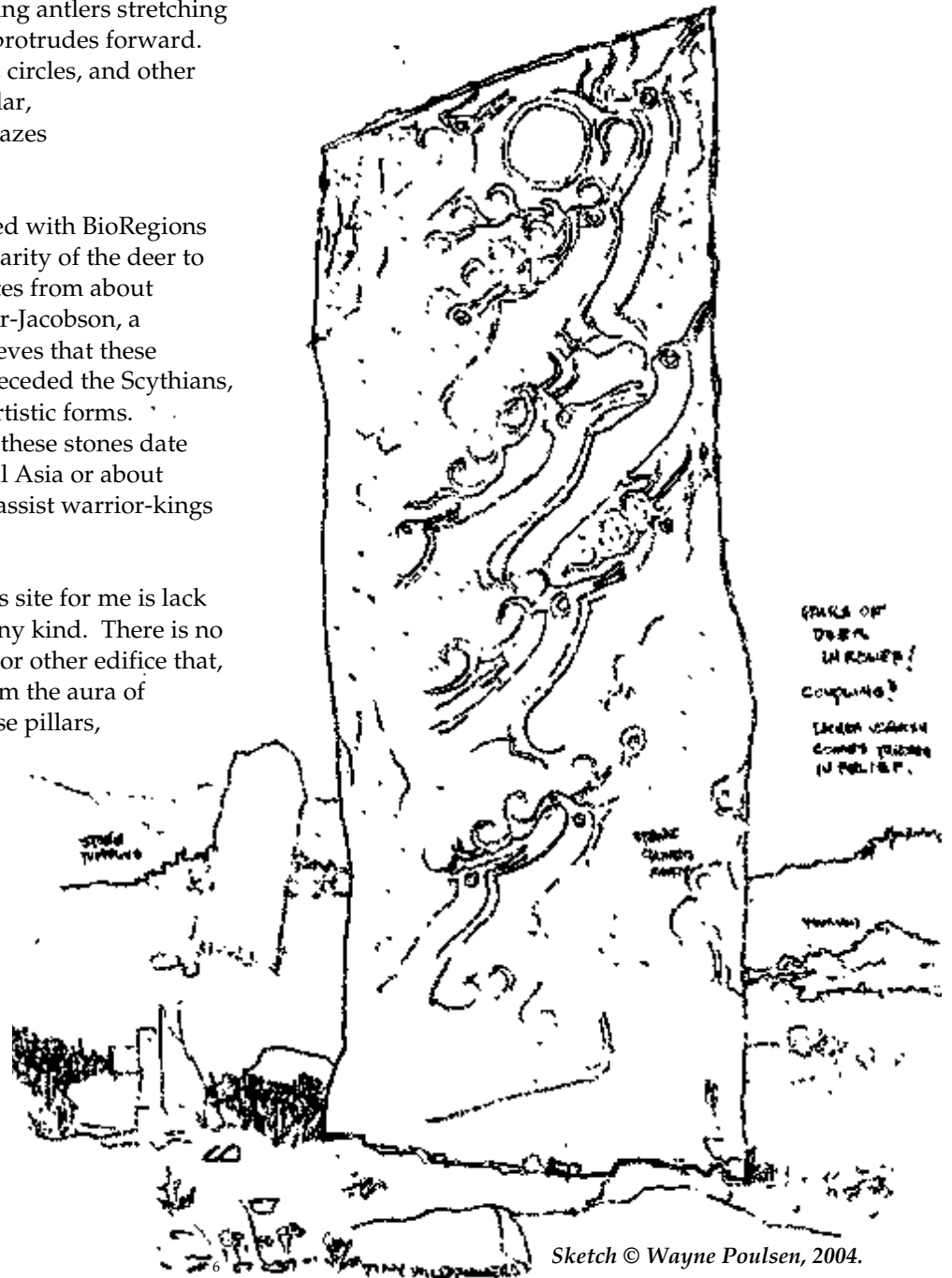
In a vast, windswept bowl about 15km west of the town of Mörön, Mongolia, a collection of stone pillars reach toward the sky, each encircled with a variety of symbols and imagery. Found throughout Mongolia and the neighboring Russian republic of Tuva, these “deerstones” have intrigued scholars for their artistic beauty as well as their unclear origins. In fact, the Smithsonian Institute for Arctic Studies has recently spearheaded efforts to study these stones in an archeological and artistic context. Smithsonian has petitioned the Mongolian government to provide greater protection to preserve these treasures for the future, although as of this date sufficient funds have not been appropriated.

In 2004, Bioregions visited the Uushig or Ushkin site. One of the larger deerstone collections, Uushig has been a focus for the Smithsonian research. Most of the stones are carved from pink granite, are rectangular, and are 8 to 12 feet high. Although the symbols upon each stone may vary, they all have the namesake deer carved on their surface. The archetypical deer ascends upwards toward the sky with several others, long curving antlers stretching along its back, and a duck-like snout protrudes forward. In addition to the deer, daggers, axes, circles, and other symbols adorn the stones. On one pillar, a human face - high on its pedestal - gazes towards the Southern horizon.

Architect Wayne Poulsen, who traveled with BioRegions in 2004, immediately noticed the similarity of the deer to those found in Scythian art, which dates from about 700 B.C. He isn't far off. Esther Tepfer-Jacobson, a leading scholar of the deerstones, believes that these stones were made by a culture that preceded the Scythians, but laid the foundation for Scythian artistic forms. The Smithsonian has determined that these stones date from the Bronze-Age period in Central Asia or about 2000 B.C. and may have been built to assist warrior-kings on their ascent to the afterlife.

One of the most striking aspects of this site for me is lack of interpretation or infrastructure of any kind. There is no visitors' center, parking lot, gift shop, or other edifice that, in my opinion, would only detract from the aura of the stones. When walking among these pillars, the immensity of time is palpable. On the horizon, through the heat-shimmer, you can almost make out one of the great Khans, looking out over the plains.

*Dave Tarby, participant in BioRegions' 2004 Mongolia Expedition, will be returning to Mongolia in 2005 to facilitate rural first aid workshops in the Darhad Valley.*



# Update From The Darhad Valley

by Mishig Jigjidsuren

*Editor's note: Communication with the remote Darhad Valley is difficult. However, Mishig – BioRegions' senior advisor in the Darhad Valley – sent us the following update in January. We have included a few editorial notes, to help you understand the programs he reports on a little better!*

January 2005

Hello!

I wish you all Happy New Year and wish you the best of all!

I will briefly describe the progress of the projects we are working on here in the Darhad Valley. Perhaps Amaraa will come and see how everything is progressing. We look forward to your return.

*Editor's note: In 2004, with support from the International Foundation, BioRegions initiated a program to sustain artisans & artists in Mongolian countryside communities. The Sustaining Artisans Program seeks to sustain culture and community through preserving, encouraging, and expanding the local economy and its fundamental constituents: artisans and skilled craftsmen. Our initial work has focused in the Darhad Valley, BioRegions' focal site. Here, Mishig reports upon grants given to five promising artisans who practice traditional and necessary skills.*

Tumursuren [seamstress] has trained 2 people. She takes orders from people, and has made many dels and other clothing. She is very busy! She gave a work report in early December, and said she was able to make a net profit of around 200,000 tugriks. Huhrii [leatherworker] also gave her report. She went to Ulaanbaatar twice to buy materials, and is training two people. Already, one of them can make Mongolian traditional boots on her own. Huhrii said she made net profit of around 190,000 tugriks.



Carpenters Nemekhbayar and Bathuyag are doing an excellent job. They report making a small ger for two people, which will rent to tourists. They are making 8 ger parts, also, and are training two people. Metalworker Uganji is making Mongolian style locks, tools to break ice for fishing, and door hinges. He sells his products. He is training one person, and so far has made a net profit of around 220,000 tugriks.

*Editor's note: Responding to needs identified by community members, BioRegions' Community Partnership Program works with local people to support public health, education, and basic infrastructure. Below, Mishig provides an update on several of our efforts, including a pilot effort to expand schooling to the Darhad people's winter camp for students who migrate with their families. This "winter migration school" is for students unable to attend the Renchinlumbe Boarding school due to lack of funds or limited spaces available in the school. Other projects include an effort to bring clean spring water (rather than river water contaminated by livestock) to the town; our ongoing sponsorship of an art contest in the local school; and the construction of a cabin for BioRegions' meetings and storage of project materials.*

Tumurhuyag continued supplying clean water for jam factory and the general community in the summer. But he had some problem with his truck engine. So he was unable to do his job for awhile. He bought an old tractor in Ulaanul soum and fixed it. Now the tractor is ready for his spring work.

We organized the school drawing contest in stages. In the first round, in November, there were many great art works done by students, but we didn't give prizes. We agreed to organize the second round in February, during Teacher's Day, and will determine the first, second, third place winners. Lamjav and Dashdavaa continue to play important roles in this work.

Baatar [former director of the Renchinlumbe Boarding School] started teaching 12 students in November. He sent me a report about the migration school, and I met Baatar's boss and some other herders. Everyone is pleased with Baatar's great job teaching young children. There are some students who can't read and write, and some who can read a little bit. Since students' literacy level is different from each other, and he is teaching them in several groups. The Baag Chief

said that since Baatar must work with children in groups, it takes all day to teach them all. The Renchinlumbe school sent them necessary books. In February, after lake is frozen, I will go over with several teachers to give the first exams. In general, the local community is very appreciative of the winter school and children are taking part with enthusiasm.

We started building 7\*5 meter cabin for our projects. Currently we are building the main frame. In the spring, windows, doors, and roof will be made – maybe around April. We are planning to include our project workers Tumursukh, Huhrii, Uuganjii, Tumurhuyag, Nemekhbayar and Bathuyag for building this cabin. Current cost of building this cabin is 350,000 tugriks, which doesn't include glasses for

windows and doors, nor paints for ceiling and floor. I suspect that we may run little short of budget in this.

For solar system at school, we need a battery which costs around 180,000 tugriks each (American battery.) They are expected to arrive February 10<sup>th</sup> in UlaanBaatar. We have similar kind of battery for Boojum's use. This is very good quality battery. We need two of them. I am also thinking to buy new solar panel too [*the old one was damaged, as BioRegions staff saw in June, 2004*]. It will significantly improve school electricity shortage.

These are the latest from our projects.

Sincerely,  
Mishig



Yes, I'd like to support **BioRegions International** in the following way:

- I want to support BioRegions' work to help students and community members understand and work towards sustainable solutions.
- I want to support the ongoing work of BioRegions International in Mongolia.
- I want to give the gift of a becoming a Friend of BioRegions.

Name GIFT RECIPIENT: Name

Address GIFT: Address

City State Zip GIFT: City State Zip

e-mail GIFT: e-mail

\$25    \$50    \$75    \$100    \$250    \$1,000    \$ \_\_\_\_\_

Please make send your check to:

**BioRegions International**  
P.O. Box 6541  
Bozeman, Montana 59771

- I wish my gift to remain anonymous
- I wish my gift to be in honor/memory of:





# BIOREGIONS

— INTERNATIONAL —

P.O. Box 6541  
Bozeman, Montana 59771  
USA

### Please Join Us

for an evening of film, a welcome from Mongolia expedition participants, and Q&A with BioRegions International and members of Bozeman's Mongolian community.

### The Story of the Weeping Camel

*Winner, Directors Guild Award for Best Documentary \* Nominee, Academy Award for Best Documentary Feature*

**Tuesday, March 29@ 7:30pm**

**Emerson Theater, 111 S. Grand Avenue, Bozeman**

*The Story of the Weeping Camel* is an enchanting film that follows the adventures of a family of herders in Mongolia's Gobi region who face a crisis when the mother camel unexpectedly rejects her newborn calf after a particularly difficult birth. Uniquely composed of equal parts reality, drama, and magic, this film is a window into a different way of life and the universal terrain of the heart.



BioRegions International is presenting *The Story of the Weeping Camel* as part of the **NEW Emerson Community Film Series**. We are among the first organizations to partner with the Emerson for this new series; proceeds benefit the sponsoring organization.

Spring Films:

Women's Voices for the Earth	March 15
BioRegions International	March 29
MSU Engineers w/out Borders (tentative)	April 12
Code Pink	April 26
Bozeman Peace Seekers	May 10
Montana Outdoor Science School	May 24

