

BIOREGIONS NEWSLETTER

Fall/Winter 2005 ✧ Volume 1, Issue 2

A Bright Future: Renchinlumbe Moves Toward Solar Power

by Catherine Kirkland

Since 2003, BioRegions has supported replacing unreliable, unsustainable diesel electricity generation with clean and renewable energy at the Renchinlumbe boarding school through a small photovoltaic (PV) system to provide electricity for the library. Upgrades last spring, sponsored by the Bozeman Sunrise Rotary Club, brought power to the school kitchen, dining room, and dormitory halls. While in Renchinlumbe in June 2005, BioRegions toured the school to witness the system in action. The school director, mayor, and hospital representatives joined Mishig, Cliff and Kate to discuss the community's current access to electricity, areas of need, and potential future expansion of PV power systems at the school and hospital. All meeting participants expressed resounding commitment to the expansion of clean and renewable energy—especially solar power—to promote social and economic growth within the community while at the same time protecting the local environment.

Mongolia is an ideal place for solar power generation. On average, the country enjoys 300 days of sunshine per year, and the vast majority of the country is not serviced by a centralized power grid. PV systems need only sunshine to operate, require little maintenance, produce no pollution, and are very low cost after installation. Increased solar power use in Renchinlumbe would set the community on the path toward energy independence – the town could grow and develop without regard to

continued on page 4...



photo by G. Wiltzie, 2002.

Small And Yet Life Changing

by Amaraa Batsukh

As a child, I remember reading a story from our elementary school textbook. The story has always intrigued me. It was about a boy who used tiny little light, generated by incense stick, to read his book at night. The boy was enslaved by his employer, who kept him busy working all day. He would illuminate the text letter by letter in order to read. It all happened in Mongolia in the early nineteen hundreds.

Today is the 21st century, and things have not changed much in rural Mongolia. Young students are trying to study in cold dark dorm rooms using candle light while wrapped in sheep skin coat, hat and gloves. And these are the fortunate ones who have the privilege of being fit into scarce dormitory rooms, while many others cry for not being able to attend school.

School children are expected to learn and grow into educated adults when they leave home for boarding school. And they are filled with enthusiasm to learn. But the situation they face in reality in boarding school is not very pleasant. Although school administration try to do their best, and provide the best they can, the small funding they receive from government falls short of total budget needed. So they desperately need help from grassroots organizations like BioRegions International. And they thank BioRegions, known locally as the “Sister Brother Regions Project”, for what they have already done for Renchinlumbe Boarding School.

I have heard about many projects focused on improving the quality of education in Mongolia. Implemented by both government and foreign funded NGO's, they often receive criticism for inefficiency. Thus, I was amazed to see how people from BioRegions International were making real difference to real people's lives, directly and efficiently. Hundreds of students used to eat in huge cafeteria, studying in cold dorm rooms which were only lit by candles at Renchinlumbe Boarding School. Now students are enjoying light bulbs used to light the school cafeteria and some dorm rooms, thanks to Sunrise Rotary Club donations.

Students and school staff were speechless with appreciation. Renchinlumbe school director said, “We are always grateful for what Cliff bagsh (*bagsh means teacher in Mongolian, people say it after the name to show respect*) has done for us. We like to think of him as a Mongolian rather than American as he got closer and closer to us

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Joy!

BioRegions International work provides many joyful moments. Some small joys from the 2005 summer work trip in the Darhad Valley include

- renewing friendships with Mongolian colleagues,
- receiving a sheep as a token of appreciation, and
- watching the winter migration school students take their final exams in the ger of their teacher Baatar.

These are just the 'tip of the iceberg' of joys we experienced with many citizens in the Darhad Valley and in Ulaanbaatar.

Here in Montana an immense joy has been the completion of graduate degrees by Teki Tsagaan Sankey (PhD) and her husband Joel Sankey (MS). I wish to express great appreciation to the Willow Springs Foundation for supporting Teki's scholarship. Another joy was the synergy of our founding Board of Directors at the July meeting as we shared common experience with Asian cultures and commitment to the vision of BioRegions International.

We have further clarified the dual roles of BioRegions International and the Montana State University BioRegions Program. MSU BioRegions Program focuses on research and education; BioRegions International focuses on service and community partnerships. Both organizations are working hard to recruit participants and raise funds to support this work. By working together, we create a unified whole in our quest to contribute towards well being for people, communities, and environments within bioregions.

Sincerely,

Cliff Montagne

President, BioRegions International



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Special Thanks

BioRegion International offers sincere thanks to the donors, businesses, and individuals who have supported and helped us move our mission forward. The list is long – our apologies in advance to anyone we've forgotten!

Donors:

Willow Springs Foundation; The International Foundation; Anonymous; Sunrise Rotary Club of Bozeman; John & Phoebe Montagne; Wayne Poulsen; Laurie Simms; Dan and Carol Runyon; Judy Montagne; Natsuko Hamamura; Tim Swanson; Glen Colclough; Carolyn Ryan; Gordon and Meredith Wiltsie.

Businesses and Organizations:

American Center for Mongolian Studies; Rotary Club of BayanZurkh 100, UlaanBataar; BoastCard Designs; Insty Prints – Dan Himsworth; Alpen Images; Emerson Cultural Center; Northern Rockies Bioneers; Refuge Sustainable Building Center; Boojum Expeditions.

Advisors, volunteers, and friends who have supported us!

Teki Tsagaan Sankey, Lois Swatland, Jory Ruggiero, Alex Kosseff; David Tarby; Natsuko “Natsuguma” Hamamura; Jen Mygatt; Tophers Sabot; Patty Shea; Robin Adams; Shel Severinghaus; Dan Center; Barbara Rusmore; Brad Webb; Pat Kearney; Ryan Van Luit, Raina Plowright.

And of course, our heartfelt and deepest thanks to the people of the Darhad Valley, friends and neighbors who continue to teach and inspire us.

BioRegions International

MISSION

BioRegions International works with land-based cultures to discover and implement local, sustainable solutions.

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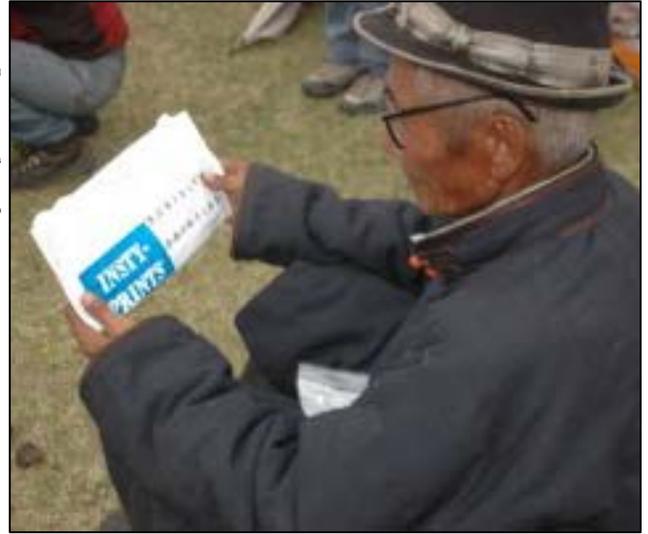
over the years.” And he continued, “Students are now able to study more efficiently and with great enthusiasm. They are Mongolia’s future. This is a great investment for our future.” It was incredible to see how small contributions such as solar panel with 128 kb power can change the lives of hundreds in Renchinlumbe.

But this is only tiny part of what BioRegions have done in Renchinlumbe and the Darhad Valley of northern Mongolia. BioRegions International works with the Renchinlumbe Boarding School, the local hospital, the Governor’s office, and local people on various service and research projects. Although the scale of funding may not be comparable to bigger organizations, they have touched the hearts of many. I have heard tons of words appreciation from local people expressing their gratitude for BioRegions staff and for what they have done, which makes me proud to be part of this great group of people and their mission.

Amaraa Batsukh has worked as an interpreter for BioRegions International for two years, and now helps coordinate projects as BioRegions new, in-Mongolia Project Assistant. In addition to working with ongoing projects, Amaraa, who studied at Trinity College and received his bachelors in Economics from the National University of Mongolia, is seeking an Alum Grant through the Mongolian Open Forum Society office (affiliate of SOROS) to help graduates of the Renchinlumbe Boarding School prepare for university life in the capital city, UlaanBaatar.



photo by C. Montagne, 2005.



With glasses donated by the NW Northwest Lions International Eyeglass Recycling Center, and support from businesses like Insty Prints of Downtown Bozeman, BioRegions International is making a real difference in people’s lives.

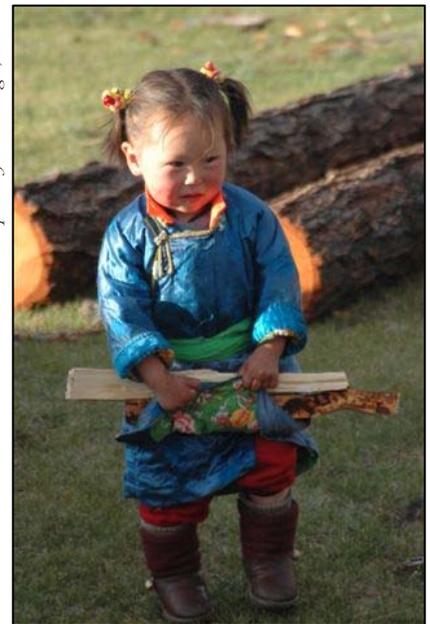
In 2005, we distributed 500 pairs of reading glasses to people over 45 years of age. These individuals are literate, but unable to read without help. The gift of glasses helps them read the newspapers received in the remote Darhad Valley, keep better track of national affairs, and engage more effectively in community affairs.

photo by C. Montagne, 2005.



Battsetseg Batbayar, 14 years old, won the gold medal from mathematics Olympiad which was held in Arhangai aimag, the “Erdem” gold medal from the Mongolian Children’s Palace, and is one of the best students in the suum. She plays a dulcimer (traditional Mongolian lap-harp) in the **Traditional Darhad Performance Group** that was started with seed funds from BioRegions International. This expanding group includes three other award winning young musicians, and has grown to involve over 10 performers. The group is coordinated by Amarjargal Purevdorj, Mongolian long-necked banjo player, with assistance from Batkhuu Dashtseveg, the local music teacher and lead horse-headed fiddle player for the group.

photo by C. Montagne, 2005.



Young girl carrying wood. Darhad Valley, northern Mongolia.

Bright Future ... continued from page 1.
rising fuel costs and without endangering the local environment.

Moreover, reliable, year-round power would vastly improve medical services at the hospital, access to information for students, and working conditions and job opportunities for the townspeople.

My role with BioRegions is to coordinate the PV power expansion effort in Renchinlumbe in collaboration with Mishig, the school director, hospital administration and other interested parties. I will seek project funding based on 1) a professional assessment of the school's PV system and 2) expansion proposals submitted by the community to BioRegions. Our first priority is to fund and execute an expansion of the school system sufficient to run additional computers, so that the Renchinlumbe boarding school can qualify for free, high-quality computers donated by the Mongolian government.

Catherine Kirkland recently completed the first year of a degree in civil and bio-resources engineering at Montana State University. Catherine holds previous degrees in cultural anthropology and international development, and gained experience in the non-profit world while working for the Central Asia Institute. In 1998, she traveled as a tourist to Mongolia. She is excited to return in 2006, to continue learning about Mongolian life and culture and to gain practical experience in engineering and development.



There is no highway to the Darhad Valley. Roads braid across fields and tundra, through rivers and wetlands, en route to this remote region.

photo by C. Montagne, 2005.



Solar School: Bozeman Sunrise Rotary makes training and expanded PV system possible.

As was reported in the Spring 2005 Bulletin, BioRegions' senior associate in Renchinlumbe, Mishig Jigjidsuren, purchased new batteries and modules this past winter to upgrade and expand the boarding school's solar power (PV) system to include the school's kitchen and dining hall.

In November, and then again in January 2006, the Renewable Energy Corporation of Mongolia will conduct solar power training sessions for a group of Renchinlumbe residents. The training covers PV system design, installation, and maintenance with special attention paid to battery care, system capacity, and energy efficiency. Following the training, an evaluation of the library and kitchen systems will be conducted to maximize utilization of the school's current system and to plan for future growth. Funding for the improvements and training came from a grant from the Bozeman Sunrise Rotary Club.

Sources in Renchinlumbe report that the Mongolian government has a program to provide schools with free, high-quality computers—if a consistent power supply is present. The Renchinlumbe school stands to receive 12-20 new computers upon installation of a PV power system that can run them.

Renchinlumbe power at a glance

Residents estimate that 30% of households in Renchinlumbe have electricity. A diesel generator provides limited power between October and April for those households that have bought into the town system and cover its operating costs--roughly \$9 per month per household. Cost per household increases or decreases depending on the number of other families who use the system. The generator consumes, on average, 100 liters per day of diesel fuel when in use. At times, Renchinlumbe is without power from the generator for 5-10 days at a time due mainly to fuel transportation issues. The diesel fuel must be trucked long distances over permafrost to reach the town, adding damage to already braided, rutted roads.

Today, ten percent of the power supply in Renchinlumbe comes from solar power, including the two systems which support the boarding school's library and kitchen. During the summer months, solar power is the only power available in town.

Women who Ruled the Mongol Empire: Manduhai Tsetsen Khatan

by *Chinzorigt Baljinnyam (Baljaa)*

Not only are Mongolians proud of Chinghis (Genghis) Khan and his powerful Mongol hordes, but also people from all around the world know of Chinghis. His male successors have received extensive attention. However, it is unknown to many that women dominated the world's largest empire for considerable periods of time. I want to tell little bit about a woman who served as the backbone of the empire in a critical time.

She was Manduhai, known forever to the grateful Mongols as Manduhai the Wise Queen. She played an important, noble role in Mongolian history in the 15th century and became incredibly famous to future generations of Mongols, people like me. She took to the battlefield and, one by one, re-conquered the steppe tribes and united them into a single nation.

In the late 15th century, it was a very difficult time for Mongolians to survive and to keep our own land from outsiders. The time was spent in warfare among the different groups of Mongols, as various Khans jostled for power and influence, both on the steppe and with the Ming (ancient China). It was during this time, while the men returned to squabbling over sheep and stealing horses, that the women kept the imperial spirit alive and a new conqueror arose, determined to restore the Mongol Empire of Genghis Khan. This period of Mongolian history is vividly described by the socialist texts as "the period of feudal disintegration."

The near-mythical Manduhai Tsetsen Hatan (Manduhai the Wise Queen) is, in my opinion, one of the first persons we must take account of and be proud of. Manduhai is usually mentioned for her role ensuring Batmonkh Dayan Khan's success, but describing her role purely as one of support belies her leadership and initiative.

The story begins when Chinghis Khan's twenty-seventh successor, Grand Khan Mandaghol, died in 1467, in a war against his great-nephew and heir Bolkho *jinong*. The

latter in his turn was assassinated before he could be proclaimed khan (1470). Now, of the once so numerous Khublaid family (descendants of Chinghis through Khubilai Khan,) there remained only a five-year old boy, Batmonkh Dayan, the son of Bolkho *jinong*. Dayan was deserted by everyone, even his mother. Mandaghol's young widow, Manduhai, took the child under her protection and proclaimed him khan. She herself then assumed command of the loyal Mongols and inflicted a defeat on the Oirad.

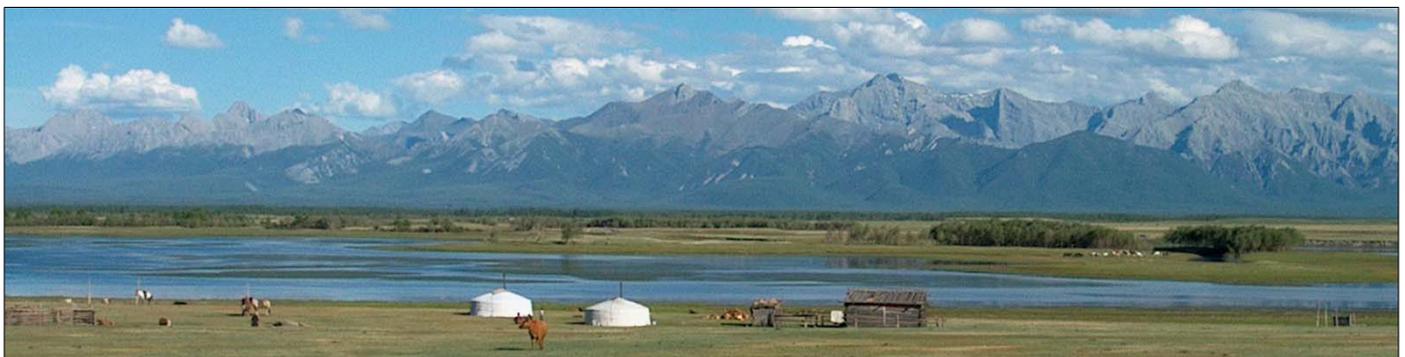
In 1481, although she loved a man named Onobold very deeply, Manduhai sacrificed herself and married young Dayan to keep alive the Golden lineage for the future of Mongolians. In 1491-92, this heroic woman, whose exploits recall those of Oeleun-eke, Chinghis Khan's mother, is again depicted at the head of an army which repulsed the Oirad. It is to Manduhai that tradition gives credit for having overthrown Oirad supremacy and restored hegemony to the eastern Mongols

Her husband, Batmonkh Dayan Khan, continued the campaigns begun by Manduhai. By the end of the fifteenth century, he had restored peace and established a new confederation comprising a vast region of North-central Asia, between the Ural Mountains and Lake Baykal. He then extended control eastward to include the remainder of Khalkha Mongolia. During this rule, quasi-feudalistic administration was reestablished, and tribes became more settled, with more specified grazing areas. After the deaths of Dayan and Manduhai, however, the empire was again to split up into warring factions.

Whatever the true facts surrounding Manduhai, central to our understanding are two basic points. First, by marrying Dayan, she managed to keep the Golden Lineage (*as Chinghis's descendants are known*) in a position of actual, as well as nominal, power. Second, in her campaigns against the Oirad, she set the stage for reunification of the Mongols.

Never before, or since, has such a large empire been ruled by women.

Baljaa, university student in Ulaan Bataar, has worked with BioRegions International as a translator for two years.



Arts and Artisans: Reflections From The Field

by Wayne Poulsen

I arrived in the Darhad Valley this summer in Mid-June, a little later than Cliff and Kate and the rest of our BioRegions crew.

Mindful of the challenges which BioRegions faces working in a remote valley in central Asia – specifically, our too-brief summer stays and the difficulty of translating and communicating – I came with a skeptical curiosity about how well our various projects are taking root. In particular, the Sustaining Artisans Program, in which I have a special interest.

What I found was encouraging beyond my expectations: a new sense of confidence among the participating artisans, a satisfaction with the opportunities that have grown from the program philosophy, and an increased identification with program goals.

I found a greater recognition of the value of artisans and the role they play in the wider community, and a growing consensus on the importance of training new generations of skilled artisans as one of the most powerful means for preserving Darhad traditions and self-reliance.

There is a new realization that local skills should benefit the community first, independent of – but not ignoring – the growing influence of tourism.

There also seems to be an evolving sense of network between the participating artisans throughout the valley, a network which will foster the broader feeling of community and an interconnectedness necessary to managing common challenges. These connections will help to propagate the ideals and benefits of the program to outlying settlements.

As our group met each day with program participants and community leaders, there emerged a new level of common purpose. I felt a sense of sharing of information, technology, and potential opportunities among contemporaries and equals, whether from Asia or North America, and a consequent improvement in the dialogue.

These achievements in cooperation are symbolized by the desire of the people of the Darhad to join in a valley-wide Awards program sponsored by BioRegions International. The *People of the Blue Valley Award* will be given in four categories: Art; Literature, Musical Expression, and Artisanhip. These awards will recognize people from all over the valley whose work best expresses the Darhad identity, skills, and tradition. What better way to extend and strengthen the vision of a community confident in its future.

Wayne Poulsen, LLC, has traveled extensively in Mongolia. Wayne serves on the Board of Directors for BioRegions International.

*BioRegions' **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.*

This program has provided artisan-apprentice grants to skilled and promising local Darhad artisans; provided seed funds and graphic design assistance to support a local traditional performance group; supported art contests at the local boarding school; enabled local students to participate in a Global Student Art Contest, by the United Nations Environmental Program; discussed with locals ways to support artisans and the importance of artisans to community; initiated a valley-wide Award program to honor expression of Darhad identity, skills, and tradition.

Student Literature Contest Entry

7th grade, 1st place: Migration

by T. Solongo

By the time when grassland starts to turn golden yellow and mother nature puts on its wonderful colorful fall outfit, people start to realize time for migration will come soon. They start getting up early in the morning with such a urgency in order to prepare hides which will be cut into thin strips and used as a rope later. All the equipment and saddles will be prepared with great care, some are especially made to fit certain animals, some are attached with soft materials, in order to prevent from friction on animal back and painted and sealed for durability. Everybody moves in hurry to get ready in time.

While preparing the animals for long hard trip, amount of weight that can be placed on each animal are decided individually. Families start preparing for the migration trip much early and begin packing everything in one morning and take off. Nomadic people are very hardworking people. Racing with morning sun they get ready for the trip without much delay and start out on lengthy road against all the odds of hitting snow storm and risk of losing animals while resting and camping several days and nights in the middle of nowhere. Once they arrive to their winter camp, they spend several months herding their animals while enjoying dairy products and other food prepared and reserved to be used during the hard winter time. Once it starts showing signs of spring coming near both human and animals feel the thrill and joy of returning to Shishged.



Kate, Otgoo, Baljaa and Dave juggle gear (including a silent Annie for first aid training) as the 2005 BioRegions work team prepares to board their flight from Ulaan Bataar to Muren.

Parents in Tings area met with BioRegions to organize a summer migration school for children unable to attend boarding school.



We Need Your Help!

As a grassroots, young non-profit, BioRegions International has many many opportunities for people to contribute! Below is a list of items and sponsors we seek – a wish list. If you can help us, please contact Kate, kate@bioregions.org, or call one of our Board Members. THANK YOU!

- ⇒ New Computer (*capable of graphic design and photo management, accounting, modern internet & operating system. Small lap-top with docking station and flat screen would be ideal.*)
- ⇒ Printer (*capable of color and double-sided printing*)
- ⇒ Sign (*eight inches high, BioRegions International logo & name*)
- ⇒ Digital camera(s), *with extra batteries/chargers/memory cards.*
- ⇒ Sponsors of first aid training in remote reaches of Darhad Valley, without easy access to any clinic. (\$515/site, 3 day training by Mongolian Red Cross.)
- ⇒ Matting material and assistance matting children's art from the Darhad Valley.
- ⇒ Sponsors for gifted students from the Darhad to attend the national **I Can Do Art Camp**, sponsored by the Art Council of Mongolia. (\$300/student includes travel, camp fee, housing, food.)
- ⇒ Scholarship support (for Mongolian graduate student)
- ⇒ Scholarship support (for Montana State University student participation in work trip to Mongolia.)
- ⇒ Growing Vegetables in the Far North – expert willing to travel to the remote, rugged Darhad Valley of Mongolia to assist locals as they initiate their first attempts to grow vegetables, in 2006.
- ⇒ Birding Expert - willing to travel to remote, rugged Darhad Valley of Mongolia to evaluate birding potential of Darhad Valley wetland system.
- ⇒ Translation Support – funds to support quality interpreters, to enable full communication and facilitate transfer of new concepts across cultures (up to \$2000)
- ⇒ Biogas Expert - willing to travel to remote, rugged Darhad Valley of Mongolia with a model biogas stove, to do local demonstration of this sustainable technology.
- ⇒ Ongoing Supporters – continuing BioRegions' rich, community-level projects and cross-cultural opportunities requires ongoing support.

Please consider making a donation!

Thank you!

Friends of BioRegions International Expedition to Northern Mongolia

June 10 – 26, 2006

Come explore the Darhad Valley of Northern Mongolia, adjacent to the Russian border. Approximately 8,000 semi-nomadic herders and 100,000 goats, sheep, cows, yaks and horses live in the valley. Siberian Taiga and rivers dominate this mountain bioregion.

What makes this expedition different from a regular tourist trip is the opportunity to visit BioRegions International projects, and to interact with local people. Leader Cliff Montagne, professor in Land Resources and Environmental Sciences at Montana State university, has spent all but one summer season in the Darhad Valley for the past nine years. With his Mongolian graduate student, Cliff guided the 2002 National Geographic Magazine expedition that led to the nomadic migration story “Mongolian Crossing,” in the October 2003 issue.

Join Us!

Cost: \$3,715, plus airfare
(cost will drop to \$3,215, if trip fills – 10 participants.)

For information, contact Kate: kate@bioregions.org, (406) 581-0550.

Yes, I'd like to support **BioRegions International** !

- I want to support the ongoing work of BioRegions International.
 I want to give the gift of a becoming a Friend of BioRegions International.

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Own a Ger! To learn more, email Kate at kate@bioregions.org.



BioRegions International is importing authentic Mongolian gers. These beautifully painted, five-walled felt tents measure ~21 feet across. Mongolian artisans hand-paint the poles, door, and center ring with traditional Mongolian designs.

All proceeds support our projects in Mongolia.

Cost: \$5,500
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