



Mission

BioRegions International is a 501c3 nonprofit organization working to “empower the nomadic cultures of Mongolia to survive in a rapidly-changing world.” BioRegions uses a holistic, community-based approach to encourage whole community sustainability based on stewardship of natural and cultural resources. We work in the areas of education, environment, health, and traditional knowledge and skills. We have been working in the Darhad Valley in northern Mongolia since 1998. This high altitude, remote and isolated valley has high poverty levels, a severe climate, and a natural resource base that is suffering from poaching, over grazing and indiscriminant forest harvest.



BioRegions staff Cliff, Mishig, and Badmaa meet with the National Geographic Conservation Trust Grant 23 Family User Group

Letter From the Director

As we celebrate working in the Darhad Valley of Mongolia for the twelfth year, we are encouraged that we have become increasingly competent and effective. Decision making with local citizens requires great patience and an understanding of this very different Central Asian culture. We work with people at the “end of the road” in Mongolia who may be neither sophisticated nor particularly motivated to try new ways of doing things. However, these are generous, full of life people who appreciate our commitment to a “bottom-up” approach for our projects and activities. There has to be “ownership” by the Mongolians in a project before it can succeed and be sustainable.

BioRegions stepped up its presence as our Mongolian staff continued summer projects with fall, winter, and spring visits. During the summer work trip, the Community Team participated in the Darhad Blue Valley Festival and focused on the National Geographic Conservation Trust Grant 23 Family User Group. The Health Team conducted a third year of screenings and initiated training workshops and brucellosis education and testing.

In education, we continued to support summer and winter ger schools and gave English lessons to interested children and adults. For the environment we held grazing workshops, encouraged grazing practice demonstrations, supported growing of winter forage and vegetables, repaired erosion control fencing, and collaborated on sustainable forestry. In the area of health, we supported countryside work of Mongolian doctors, dentists and eye doctors, provided field training for countryside (bag) doctors, and supported field and hospital experiences for medical students from the University of Washington International Health Opportunities Program and the Health Sciences University of Mongolia. Health screenings and rural first aid training continued in conjunction with the Renchinlumbe hospital. Also, herd animals and their herders were sampled for brucellosis.

Traditional knowledge and skills were celebrated for the 4th year with the Blue Valley Festival. The Artisan Program continued to sponsor apprenticeship training and instruction in milk product preparation. Artisan products were displayed at a fall agriculture exposition and workshop. The first Community Building grants were awarded to build a cabin and purchase machinery for making artisan items to help support families with no income. BioRegions Mongolian staff made spring, fall, and winter visits to continue projects started in the summer and to provide dentistry and eye doctor services.

We are excited about progress made by the Montana State University Bioregions Program to expand our focus and geographic areas of work to include a more ‘complete’ bioregion and more fully engage native peoples.

Our work is generously supported by two major donors: the Stanley Family Foundation and the Willow Springs Foundation. Their vital support is much appreciated.

-Cliff Montagne

COMMUNITY

Reflections: Marc Shapiro, Dartmouth College

We arrived near midnight May 12, 2009, delirious and weary after a few days of travel, but excited to be standing on what to me was a different planet. As I quickly learned upon arrival, Mongolia is rapidly modernizing. The capital city of Ulaanbaatar is a potpourri of foreign objects, looking a bit like a quilt of many other nations sewn together with Mongolian culture. China and Russia are quickly investing in the rich mineral deposits that have lain dormant under Mongolian bedrock. Electricity lines are spreading like spider webs, extending farther each year.

All of this development is in stark contrast to the traditional nomadic culture that has remained largely unchanged. Even through the 70 years of a socialist government, Mongolia retained its rich traditions and customs. Since 1990, animal numbers have spiraled out of control and grazing practices are not regulated by the government. Without any means of employment, families rely solely on their animals for both food and livelihood. Rather than produce fewer, better animals, most herder's rely on having as many animals as possible.

The BioRegions Program is trying to fill a void in the transition to democracy from socialism. My initial attraction to BioRegions was less the actual work they were doing, but rather the manner in which it was done. They use a unique process called "Holistic Management," in which one always takes into account the "whole" when making decisions. BioRegions focuses on trying to support the people of the Darhad, not just give them aid. To me, BioRegions was one of the first organizations I saw that acted with humility and sustainability in their practice. I wanted to learn about how BRI does this work and the realities of working as a foreigner in an NGO in an area so far from most modern infrastructure and services.

The other 12 students arrived on June 1st, now we were 15 traveling with a cook, a generator, and many kilos of project materials. We moved to the 23 Family User Group spring camp. I began to focus on my role as a "geotourism" organizer. Through interviews with the various families, I wrote up "Geotourism Guidelines" for the Darhad, a multi-lingual document for tourists coming into the valley. Eventually, the document will be used to facilitate home-stays with families, a cultural translator of sorts to make sure tourists and hosts have fewer misunderstandings. Following the holistic management process, I spoke to people about how increased tourism would



Cell phones come to the Darhad - BioRegions staff Mishig, Badmaa, and Sunjee

affect other parts of their lives for better or worse, and whether or not they were even interested in hosting tourists. The goal was to find out what they wanted and help them organize a program they could run in the future, once BioRegions was gone.

Leaving Mongolia at the end of June was much harder than I expected. I realized the deep connections I had with the Mongolian herder culture, even though I am coming from a distinctly different background. I hope to continue working in Mongolia; at the very least to deepen my connection with these people I have only begun to understand.

Reflections: Kaelin Kiesel, Montana State University

The Mongolians have simplicity, kindness, generosity, a wholesome character, and a rich sense of place. They have never met a stranger in their lives, but instead welcomed us into their homes and families, saying, "We are all children of the same mother." The scene is reminiscent of descriptions from my great-grandfather as he settled and lived in a small farming community in eastern Oregon, 100 years ago.

Unfortunately, the rich heritage and nomadic lifestyle are becoming increasingly fragile as globalization is abruptly confronting the remote Darhad Valley. The bulk of the younger generation is struggling to find reasons they should endure the harsh lifestyle, and are eagerly awaiting the bright lights of the city. Natural and community resources are in decline as unsustainable mining, illegal poaching, and overgrazing emerge as dominating practices. Limited economic opportunity is a factor that keeps Mongolians longing for income, financial security, and economic independence.

23 Families User Group

BioRegions has been working with this group of families for two years as a major component of the National Geographic Conservation Trust Grant: *Enhancing Environmental and Cultural Stewardship in the Darhad Valley, Northern Mongolia*. As a cooperative group, they have received permission from the government to fence off the entrance to their herding area to preserve the grass for domestic and wild animals. We met with them over several days to help form a holistic goal and move ahead with plans to develop more sustainable forestry and grazing practices and support traditional artisanship skills.

This year we provided grant money to build a small cabin/ community center and to buy a generator and power tools so the



Marc Shapiro teaching English at the Renchinlumbe School

artisans can produce useful goods for sale or trade. Many young families depend on their parents for their livelihood as there is no employment available. In 2008, saddle makers Lisa and Loren Skyhorse from Durango, CO cooperated with BRI to host leather goods training to add artistic value to items Darhad citizens currently make. The women have formed a wool felting group with a newly purchased carding machine and the men are building furniture and producing leather work.

To develop the National Geographic-coined term “geotourism”, families hosted Work Trip members and together they developed a geotourism manual for both hosts and visitors. This activity, sensitive to place and cultural differences, can provide needed income while building mutual respect and understanding.

EDUCATION

Education is a core value for any rural community wanting to develop its potential and interact with the outside world. In Mongolian socialist times, countryside boarding schools provided sustenance and classical education for all children and literacy rates reached 97%. Now there is less government support, but the need for literacy is as critical as ever. BioRegions sees education as preparing the fertile seedbed for positive growth in this globalizing world. Citizens who are literate, curious, and innovative can provide the framework for productive community partnerships to meet the visions of BioRegions for improving environmental quality, personal health, and awareness of traditional knowledge.

Around the globe, there is new awareness of the benefit of experiential and informal education which uses the local environment and the cultural setting to add context and reality to learning. In Mongolia, the Ministry of Education and several non-governmental organizations are working to bring local ecology into formal learning.

In the Darhad Valley, BioRegions is supporting both formal and informal learning. In 2008, Renchinlhumbe Boarding School made national headlines as having the highest school drop-out rate in Mongolia. Of the 1437 school age children, 350 were not in school. In 2009, 70% of the teachers failed the national competency test. So, in addition to the BioRegions ger school program, which provides basic literacy for children who do not attend regular school, we decided to began partial support for a government summer school to prepare and encourage children to enter the regular boarding school. In the boarding school, BioRegions continues to sponsor the school art and literature contests which provide a chance to excel at these basic skills within the context of the local environment and culture. For the first time, Work Trip participants met local students in the school classroom for English lessons over a period of several weeks, using teaching materials prepared by the English teacher and BRI collaborator Roxanne Sloan. On the informal side, we provided field trip and work funds, seeds, and supplies for ecology clubs in both Hatgal and Renchinlhumbe enabling them to visit field sites, participate in a global science fair, establish vegetable gardens, and work on sand dune restoration.

ENVIRONMENT

Our year round presence has been enhanced by the work of Yale Forestry School Ph.D graduate student Tom James who is finishing his Fulbright Scholarship in the Darhad Valley. While his forestry

research focuses on larch growth rates and environmental change, he is also deeply engaged with the 23 Family User Group in the process of setting up officially recognized “user groups” to develop sustainable forestry and grazing practices. In 2008, the 23 Family group asked BioRegions to bring examples of sustainable grazing practices. So, as part of our 2009 Work Trip preparation class, LRES 480 *Sustainable Development in Mongolia and Montana*, Lora Soderquist compiled a handbook of grazing practices titled “Healthy Pastures Using Animals: Reversing the Effects of Desertification”. It was a great satisfaction to watch Lora share examples of grazing practices from Africa, Inner Mongolia, Israel, and Argentina with 23 Family herders. This led to several demonstration experiments in which herders tried out techniques of bunching animals and allowing adequate time for grass recovery. Focusing on examples of grazing practices got local herders thinking creatively about realistic solutions to their overgrazing situations.

We continued our work on brucellosis through surveys and testing of people in 2009. Animals and humans pass the disease back and forth. Jen Higgins is currently at Colorado State Univ., School of Veterinary Science after also being awarded a Fulbright scholarship and spending 6 months in the Darhad Valley. BRI greatly values these fluent Mongolian speakers who also have an American perspective to help us understand the nuances of Mongolian culture.

Reflections: Lora Soderquist, Grazing Specialist

I was able to apply my education in a way that not only bettered myself but also a community so far away from home. There is a tremendous amount of gratification gained from venturing halfway around the world to live and work with a rural community that faces many of the same obstacles as we do in Montana.

I found the experience had also become an exchange of knowledge. Many of the traditional ecological approaches of the nomadic herders mirrored the scientific research I had brought along to share. I discovered many of these traditions could be a valuable tool to integrate into sustainable land management approaches at home. The exchange made me recognize that I would be taking home knowledge that could be applied in my own life, personally and towards a career. I gained the experience of working with different individuals from across the United States and from multiple disciplines. This interaction allowed me the experience of the cooperation and teamwork required to make our trip a success.

Our last night in the valley ended in a great fest being held in honor of us! As we dined upon fresh mutton and potatoes, the



Jen Higgins vaccinating a cow for Brucellosis



23 Family leader Nyamrenchin and Badmaa examining degraded winter pasture

community leader stood before us with tears in his eyes and expressed his gratitude for all the work we had done. He was deeply touched that we came so far to help the community and by our concerns for the herders, the valley, and their culture. I was astounded that in such a relatively short period of time, such a positive impact could be made upon an entire community and myself. I am so fortunate to have been a member of the BioRegions Program - the experience will forever be with me.

HEALTH

BioRegions expanded its health focus this year to include brucellosis, a disease with huge impact on people, as well as animals. Jen Higgins and Kestrel Schmidt sampled cattle, sheep and goats along with some herders in cooperation with Dr. Erdenebaatar of the Mongolian State University of Agriculture Veterinary School and Renchinlumbe Peoples Hospital. They also presented education sessions for local herders and health workers.

Montana-Mongolia Health Care Project, Susan Gibson, Health Team Leader

The Montana WWAMI (Washington, Wyoming, Alaska, Montana, Idaho) Medical Program partnered with MSU BioRegions for a third year and participated in a health project designed by local physicians in Mongolia. Mongolia was selected by the University of Washington as an International Health Opportunity (IHOP) site for summer 2009. Two WWAMI students, Ciara Huntington and Erica Nees, were chosen to team with the healthcare group from Montana. Other members of the work team were Dr. Katie Woods, Family Medicine Resident Physician from Billings, and 2 Mongolian medical students, Undraa Ganzukh and Enkhtuul Dambadarjaa, from the Health Sciences University of Mongolia (HSUM). All worked with Dr. Purevsuren, director of Renchinlumbe People's Hospital, and other local hospital physicians and personnel.

The team performed screenings for hypertension, depression, urinary tract infections, symptoms of brucellosis and other general health concerns. At the request of the Mongolians, Dr. Katie Woods and the BRI health team also conducted a 3-day training workshop for 15 physician assistants from Renchinlumbe and three neighboring soums in the Darhad Valley. Workshop topics included women's and children's health issues and first aid training refreshers,

such as treatment of fractures, dislocations, burns, frostbite, heat exhaustion and related medical issues.

The Montana WWAMI Program and BioRegions hosted the two Mongolian medical students to visit Montana for the month of August. They observed physicians in Bozeman and the Billings Family Residency Program to learn about health issues in Montana.

The BioRegions/WWAMI health team will return to Mongolia in 2010 and continue to build a strong and mutually beneficial relationship. Future student exchanges and possible resident and faculty physician exchanges are also priorities. The health team has been encouraged to continue training workshops for local Mongolian doctors, physician assistants and nursing staff in accordance with the priorities of rural Mongolia. *For more on the Brucellosis Project please see our website, www.bioregions.org.*

TRADITIONAL KNOWLEDGE AND SKILLS

Arts and Artisans Program

Blue Valley Festival, Wayne Poulsen, BRI Board member

The 2009 Blue Valley Festival was held in Renchinlumbe for the 5th year. Silver Cup prizes for the Awards, Hatag scarves and printed certificates for the first five award places were brought from Ulan Bataar. In keeping with the cultural tradition, money is also awarded to the prize winners. The evening before the event, in what has become one of the most productive and fascinating parts of hosting this event, we met with the judges for the exhibitions, poetry and musical presentations, each judge representing communities in different parts of the Darhad Valley. As in the past, we explained the inspiration and purposes of the Blue Valley Festival, and that the awards are intended to spotlight the culture of the Darhad Valley and be a celebration of the unique life. The awards are not granted solely on technical merit but on celebrating passion and expression of these qualities of life.

Song, poetry and artistic talents have been displayed by Darhad citizens since the Blue Valley Festival was initiated. The unique culture of the Darhad Valley or "Blue Valley" is now proposed to be placed on exhibit in Muren the Khuvsgol provincial capital. Although a 12 hour drive away from the valley, the local citizens feel it is time to show off their skills to a wider audience. This audience may well include Russian Buryats from the area directly north of Khovsgol, Russian Tuvans who are widely known for their throat



Dr. Katie Woods conducting a health screening

singing, and singers and artists from the Russian Altai to the west.

Diverse Frontiers

This new workshop is co sponsored by BioRegions and Colorado Mountain College for Middle School parents, students and teachers to cultivate community identity through art and writing. Its vision is to encourage children to think of themselves as living in a global community and to inspire an appreciation for, and dialogue about, local cultures. Using art and their creative imaginations, children will exchange stories and images of their local culture with other children around the world. During the workshop, the children create a storytelling “toolbox” containing art materials and curriculum information designed to encourage creative storytelling that reflects, enriches and shares the daily lives of children in their local community.

Four years ago, the Mongolian children created a trunk filled with samples of their culture and clothes. Children from Belgrade, MT and children on the Northern Cheyenne Reservation in Lame Deer, MT also were part of the exchange with drawings and photos. A canvas mural of the Darhad Valley, sponsored by BioRegions and drawn in the Renchinlumbe School, has been touring the world for the past 8 years as part of a United Nations Children’s Art Show.

Under the Diverse Frontiers program, classrooms, libraries and other local places where children tell and illustrate the stories of their daily lives will be encouraged to use this unique storytelling toolbox to produce a selection of artwork and personal narratives. These materials will be shipped, along with a toolbox, to a group of students somewhere else in the world, thus beginning an on-going exchange of ideas and images that bring the diverse frontiers of children’s knowledge into other children’s lives to encourage curiosity about, and tolerance for, cultural differences.

Skyhorse Saddle Company

In 2008, BioRegions staff person Badmaa helped saddlemakers Lisa and Loren Skyhorse from Durango, CO conduct the 1st leather craft workshop in the Darhad Valley. The Skyhorse team provided monetary prizes for the best leatherwork at the Blue Valley Festival. We hope the Skyhorse team can return to Mongolia in 2010. To learn more about their project see: www.skyhorse.com.



23 Families using new carding maching, generator and power equipment in the background



Best of Show Vegetables at BioRegions autumn exposition

Artisan Apprenticeships

During the September fall visit to the Darhad valley by BRI staff, 6 artisans were selected for grants for the 2009-10 year. With the receipt of approximately \$100 paid twice a year they have a responsibility to supply the local artisan shop and teach their skills to young people.

For a small monetary expense, the new artisans shop in Renchinlumbe is staffed with a BRI funded sales person. They now have a sign and many products in the store for people to buy as gifts for weddings and celebrations. Before this time the artisans had no public outlet for sales.

At the request of local citizens, BRI sponsored trainings for the production of quality dairy products including airag (fermented mare’s milk) and aaruul (hard cheese eaten during the winter), and vegetable growing, processing and storage. In October, an exhibition for the “biggest and the best” was held and BRI certificates were awarded by the government leader to the winners.

Importance of Story

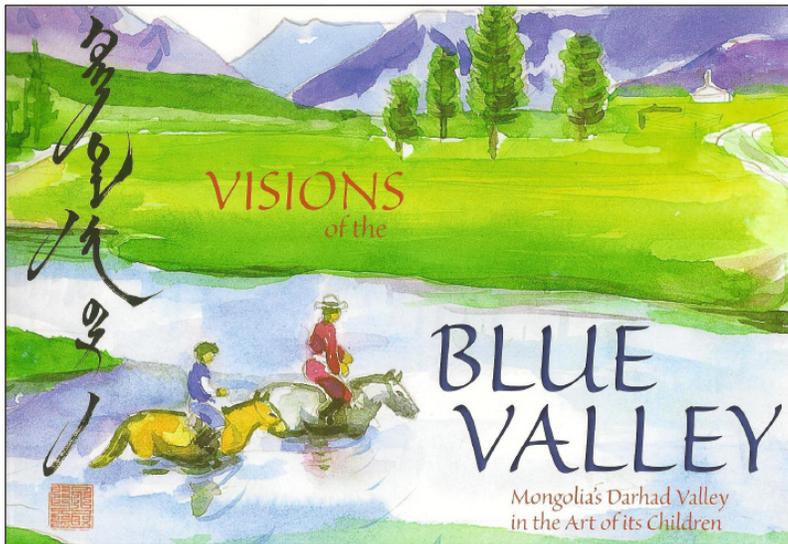
In 2001, Eric Sankey helped BioRegions realize the importance of local stories by starting the annual Renchinlumbe School literature contest. This year, anthropology major Tom Conte asked elders to share folklore tales dealing with natural resources and their use. While the elders told the tales, their grandchildren sketched their own concepts of the same story to provide another viewpoint. Shannon Prince, recipient of a Dartmouth College post-graduate Lombard Fellowship, spent July and August with translator Soyoloo interviewing Darhad and Tuvan people. She is now creating an ethnographic reference work on the Darhad and Tuvan communities to help them relearn and continue the traditional forms of knowledge and practices that were repressed during communism.

BioRegions 2010 Work Trip

The 2010 Work Trip has been tentatively planned for May 25th to July 3rd. Please contact us at info@bioregions.org if you are interested.

Montana State University BioRegions Program

Please see our new webiste: www.montana.edu/bioregions/.



Visions of the the Blue Valley - Mongolia's Darhad Valley In the Art of its Children

...a compilation of children's artwork from the Renchinlhumbe school in the Darhad Valley, Mongolia which displays visions of their surrounding environment. The artwork is promoted by an annual student art and music contest sponsored by BioRegions International.

It is a 76 page soft-covered book published by People's Press, LCC of Aspen, CO. The cost is \$15 plus shipping and handling (if needed).

The book can be purchased on-line at www.bioregions.org or by mail at P.O. Box 6451, Bozeman, MT 59771.

BioRegions International

BioRegions International works to empower the nomadic cultures of Mongolia to survive in a rapidly-changing world. We support holistic, locally-based projects promoting public health, education, environmental preservation, and sustainable economic development.

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