

LakeNet News

World Lakes Network



Winter 2003-2004

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LakeNet on theGO



LakeNet staff members have been on the move recently, working with their partners in Armenia (Lake Sevan), Kyrgyzstan (Lake Issyk-kul), Ethiopia (Lake Tana), Kenya (lakes Victoria and Nakuru) and the Philippines (Laguna de Bay). In the next quarter, LakeNet will conduct site visits to Mexico (Lake Chapala) and India (Lake Chilika). Other significant LakeNet activities included an Africa Regional Lake Basin Management Initiative meeting in Nairobi, Kenya and the first meetings of national lake networks in India and the Philippines. ●



LakeNet Director Lisa Borre demonstrates the use of GIS technologies to inventory protected areas in the Issyk-kul Biosphere Reserve.

LakeNet Gets Federal Grant to Enhance Programs at Leahy Center

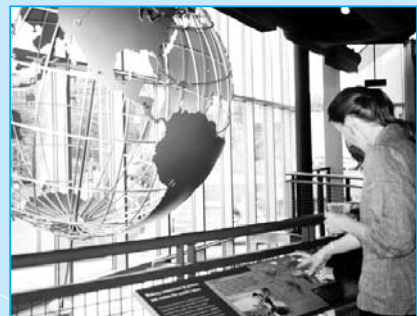
LakeNet, the global non-profit organization devoted to healthy lakes, has been awarded a \$75,000 grant by the Environmental Protection Agency's (EPA) New England Office. LakeNet Director Lisa Borre said the grant will be used to expand LakeNet's programs in connection with the Leahy Center.

A dramatic feature of the center's interior is a giant globe showing the location of lakes worldwide, designed by Boston-based Amaze Design with the assistance of LakeNet. One of the popular attractions of ECHO is a Resource Room operated by the Lake Champlain Basin Program, where visitors can find in-depth information about each exhibit. With the EPA grant, LakeNet will be developing educational materials and programs for use in the Resource Room.

"ECHO has proven to be a magnet for residents and tourists alike," said Borre, noting that attendance in its initial five months substantially exceeds original expectations of 100,000 annually. "Its exhibits appeal to all ages and there is a strong educational component to the overall experience," she said. "One of LakeNet's goals is to educate the public about the critical importance of clean water to public health and to the world's economy – and that is precisely the

story that ECHO tells so beautifully."

LakeNet is working closely with ECHO on creative ways to expand its educational opportunities. "One of our dreams is to have lake science and education centers on every lake and to bring the story of world lakes to existing museums and science centers all over the world," said Borre. "Our alliance with the Leahy Center is the first step towards realizing that dream." ●



The global connections exhibit at ECHO features Lake Champlain's sister lakes and LakeNet's international work.

ECHO at the Leahy Center Draws Record Crowds

Since its grand opening in May 2003, 100,000 people have visited ECHO, the \$14.5 million lake aquarium and educational facility in the Leahy Center for Lake Champlain in Burlington, Vermont. Named in honor of United States Senator Patrick Leahy and his wife Marcelle, the center houses 100 interactive exhibits and 2,200 live fish, amphibians and reptiles. Senator Leahy provided leadership in securing funds for the project, half of which came from the federal government, including the U.S. Environmental Protection Agency (EPA). ●



Senator Patrick Leahy welcomes people to ECHO during an opening reception at the Leahy Center for Lake Champlain on May 29, 2003.

worldlakes.org Earns Accolades

LakeNet's newly enhanced website is up and running, and represents a major expansion in the quality and quantity of practical information available on a wide range of lakes and lake issues. The new website at www.worldlakes.org is the culmination of five years of information collection on over 2,000 lakes around the world.

The user-friendly site features photos, maps, information on lake threats and promising approaches and links to hundreds of resources. The maps and geographical information for the website are drawn from a database of more than 240,000 lakes.

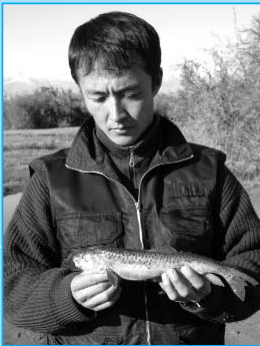
"We are very excited about creating this much-needed compilation of data about lake management," said Lisa Borre. "Links to hundreds of lake-related websites create a rich resource for citizen activists, policy makers, environmental groups, scientists, students and the general public around the world. This brings us a step closer to fulfilling our mission of providing information services that educate and inspire people, cultivate leadership and strengthen the network of lake organizations."

Lake Profiles on the new website are already being used by lake managers and activists around the world to good effect. Salvador Montenegro, a leading researcher and conservationist in Nicaragua, said, "I take my laptop to meetings with local officials and show them the LakeNet profile of our lake to underscore how important we are globally, and the fact that international networks are watching and interested." ●

Naked Osman Found in Lake Issyk-Kul

The Naked Osman, a species of fish thought to be extinct, was caught by a local fisherman in Lake Issyk-kul during a LakeNet field trip to this region of Kyrgyzstan. The identification of the fish was confirmed by Avazbek Japarovich, a fisheries expert and Deputy Director of the Biosphere Reserve. The fish had not been seen in the lake for more than four years, despite intensive efforts to catch it for the purpose of documenting its existence and restoring it to the lake.

The population of this native Lake Issyk-kul fish declined when species of fish from Lake Sevan and other lakes were introduced into the lake beginning in 1930. The new species were considered more desirable for commercial fishing, but eventually provided too much competition for the Naked Osman, forcing it to the brink of extinction. "I went to Kyrgyzstan expecting to write an obituary to this important fish species," commented LakeNet President, David Read Barker. "I was pleasantly surprised to find a specimen of the fish. It gives new hope for the possibility of resuming restoration efforts." ●



Rasul Baetov of the Issyk-kul Biosphere Reserve holds a specimen of the naked osman fish.

Travel Produces Positive Partnership

In Kyrgyzstan, the former Soviet republic in Central Asia, LakeNet President David Read Barker signed a Memorandum of Cooperation with the Directorate General of the Issyk-kul Biosphere Reserve. The two groups will work together on the conservation and sustainable development of Lake Issyk-kul – the second largest alpine lake in the world - and its drainage basin.

LakeNet awarded a small grant to the Biosphere Reserve Directorate General with funding from USAID for technology transfer and operating expenses related to winter bird counts, inventorying protected areas around the lake and conserving its diversity. LakeNet and the Issyk-kul Biosphere Reserve will also cooperate on a pilot project to demonstrate the use of GIS mapping technology in lake management. ●

Annapolis Students Find Pen Pals in Krygyzstan

Several days before LakeNet president David Read Barker left for Lake Issyk-kul in Krygyzstan, he made a special visit to third graders at Tyler Heights Elementary School in Annapolis. Wearing a traditional Krygyzstan hat called a kalpak, Dr. Barker spoke to the students about his impending trip to a country 6,662 miles away from LakeNet's Annapolis Secretariat, and asked them to write letters that he could take along for distribution to their counterparts in a town near the lake.



David Barker demonstrates the salinity of Lake Issyk-kul to students at Tyler Heights Elementary School by mixing together table salt and tap water.

"This was an experiment in cross-cultural communication among children of two very different countries – something I hope we can incorporate into LakeNet's outreach to young people," said Dr. Barker. The initial experiment was successful, despite the obvious language barriers. The letters were delivered to a grade 3-5 class upon arrival, and Dr. Barker hand-carried replies back to each Annapolis third grade correspondent.

Their teacher, Andrea Barker, said her students were excited about the responses they received. "Nearly every letter mentioned how beautiful Lake Issyk-kul is – and how it was a special part of their lives," she said. "Having a pen pal in a far away land is a wonderful way for children to learn about other cultures and to practice their writing skills." ●

NEW Network of Nicaraguan Mayors Works to Protect Lake Cocibolca

Nicaragua is home to numerous spectacular lakes, some created by explosive volcanic eruptions that left large craters, since filled with rainwater.

Others were created by tectonic forces and are home to rare native species that exist nowhere else on earth.

Lake Cocibolca, also known as Lake Nicaragua, is the largest lake in Central America and one of the 40 largest lakes in the world. Cocibolca, which means "sweet sea," is a gem in terms of biodiversity and its potential for sustainable development. It is one of the very few lakes on earth, perhaps the only lake, to have sharks swimming in its waters. Shark numbers appear to have dropped dramatically in recent years, at least partially due to earthquakes that lowered the water depth in the main river in which the deep water-loving sharks migrate up to the lake.

LakeNet President David R. Barker and Conservation Director Laurie Duker traveled to Nicaragua in 2003 to explore with local partners how they might work together to protect Nicaraguan lakes. LakeNet's primary local part-



Lake Cocibolca in Nicaragua is one of the 40 largest lakes in the world, and is home to sharks that migrate up the San Juan River.

ner in Nicaragua is the university-based Research Center for Inland Waters of Nicaragua (CIRA-UNAN). The Center's Director Salvador Montenegro had identified as a top priority bringing together political leaders from around Cocibolca to identify and prioritize steps to protect their lake.

LakeNet awarded a small grant with funding from USAID for a meeting in Grenada, on the shores of Lake Cocibolca, of mayors from all the towns and cities surrounding the lake. This first

meeting of the newly organized network of mayors (AMUGRAN) was held during LakeNet's visit and provided an opportunity for the group to pool information and strategize about how to best protect their lake.

The new coalition used the meeting and the press interest it generated to raise awareness of critical lake issues with national government leaders. The President of Nicaragua addressed the group,

pledging his government's support for the lake. AMUGRAN's first priority is to have Nicaragua establish a Sustainable Development Corridor that would include the entire watersheds of lakes Cocibolca and Xolotan, as well as their major tributary, the Rio San Juan, and create a management entity to develop a comprehensive management plan for the basin. ●

International Steering Committee Guides Global Network Activities

Over the past six years, LakeNet has grown from an informal network operated as a program of a non-profit organization into a dynamic, global network serving members and partners in more than 100 countries. In 2002, LakeNet established an International Steering Committee to guide network activities in Asia, Africa, Europe, Central & South America and North America. In addition, a strategic planning process was initiated as a means of



LakeNet's international Steering Committee met at the 3rd World Water Forum in Kyoto, Japan.

strengthening LakeNet's global operations and supporting local and country-wide lake initiatives, especially in developing countries. ●

Lakes Mentioned in This Issue



LakeNet is now working with members and partners in more than 100 countries. The lakes mentioned in this issue of LakeNet News are pinpointed on the map above.

Ask Away

LakeNet Conservation Director Laurie Duker will be delighted to respond to your questions regarding the world's lakes. For space reasons, the answers may be short but will include information on how to access further data. Laurie moderates LakeNet's electronic forum and manages its website. Please email your questions to her at info@world-lakes.org.



How many lakes are there in the world?

Believe it or not, there are more than five million lakes in the world greater than 2.5 acres (.01km²). However, there are only about 250 lakes larger than 123,550 acres (500 km²). ●

What country has the most lakes?

With more than 800,000 lakes, Canada has more than any other country. Widespread glaciers during the last ice age in Canada created almost two million lakes! Canada also has two of the largest lakes in the world – Great Slave Lake and Great Bear Lake, and with the United States, it also shares the North American Great Lakes. ●



How does the United States stack up?

Incredibly enough, no one seems to have a definitive estimate of the number of lakes in the United States. The estimate is that there are about 100,000 lakes in the U.S. The U.S. Environmental Protection Agency estimates that the water in about 40 percent of these lakes is polluted and un-safe for swimming, fishing or drinking. ●

What are the differences among lakes around the world?

There is tremendous variety in the kinds of lakes world wide, as well as the kinds of plants and animals that live in them. There are boiling lakes (in Dominica), liquid lakes hidden under four kilometers of ice (Antarctica), pink lakes (in Australia), spotted lakes (in Canada) and lakes five times saltier than the ocean. There are alpine lakes (having high elevations) and crypto lakes (lakes with some portion of their water below sea level). Some "unnatural" lakes are being created this year, as glaciers melt in the Himalaya Mountains. A handful of lakes are more than five million years old and provide a home to a number of species that exist nowhere else on earth. ●

LakeNet Staff Leadership...

DAVID READ BARKER, Ph.D., President



David Read Barker has spent more than 35 years promoting environmentally sustainable development in poor nations through partnerships among government, community groups and businesses to conserve biological and cultural resources while increasing income and human resources. Educated as a medical anthropologist, he holds a Ph.D. degree from the New School for Social Research and was a co-founder of Management Systems International. Dr. Barker became president of LakeNet in 1997 after having served on its Board of Trustees since 1994.

LISA BORRE, Vice President & Director



Lisa Borre has spent more than 15 years working to protect and restore the health of lakes and wetlands. She has a B.A. in geology from the University of Vermont and a Master's Degree in Environmental Management from Yale University. From 1990 to 1997, she was the coordinator of the Lake Champlain Basin Program and facilitated the development of a comprehensive plan which is now considered a model of integrated water resources management. In 1997, Borre co-founded LakeNet with Dr. Barker.

LAURIE DUKER, Conservation Director



Duker was appointed Conservation Director of LakeNet in January 2001 after spending a year with the organization as an International Waters Fellow while completing her graduate studies at the University of Maryland's Sustainable Development and Conservation Biology (CONS) Department. Duker has a B.A. in Sociology from Pomona College in

California, an M.B.A. from Yale University and a M.S. from the University of Maryland.

HARYATININGSIH "NING" MOEDJODO, Indonesia Country Director



As LakeNet's Indonesia Country Director, Ning coordinates programs related to freshwater and coastal management in Indonesia, a country with 13,500 islands and the longest coastline in the world. She is the founder of an Indonesian Lake Network and serves as an advisor and liaison between U.S. and Indonesian partners on the Lake Toba-Lake Champlain Sister Lake Exchange and the global Lake Basin Management Initiative. Ning has a degree in Engineering from the Regional and City Planning Department at Bandung Institute of Technology in Bandung, Indonesia and recently completed a Hubert H. Humphrey Fellowship at the University of Washington in Seattle.

Letter from the President

The year 2003 marks the 25th anniversary of the founding of our organization – coinciding with the celebration of the International Year of Freshwater as declared by the United Nations. It has been a pretty amazing year for LakeNet and its 1,000 members in more than 100 countries worldwide.

Of many milestones, one of the most significant was a remarkable international workshop at Saint Michael's College in Burlington, Vermont. Through grants from the United States Agency for International Development (USAID) and the Global Environment Facility (GEF) as well as the support of U.S. Senator Patrick Leahy from Vermont, LakeNet was able to help bring together 92 leaders from government, academia and environmental groups for an intensive five days of sharing of experiences and "lessons learned." Despite our increasing dependence on electronic communications, nothing is more effective than interacting face-to-face with people dedicated to a common cause – in this case the conservation of lakes and the watersheds that surround them.

Because so many people all over the world have asked how they can support or participate in our work, we have established a Friends Program as well as an Endowment Account. We are even developing an Adopt-a-Lake program, under which you can identify a lake in our network that particularly interests you and request that donations be directed to its particular lake and watershed conservation programs.

We look forward to working with you in the coming year to realize our shared vision of healthy lakes surrounded by vibrant communities.



Sincerely,

A handwritten signature in black ink that reads "D. Barker".

David Read Barker
President
LakeNet



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LakeNet support Is Broad-Based

LakeNet's work is supported by contributions from individuals and organizations, by grants from foundations; and by grants, cooperative agreements and contracts from the United States and foreign governments and from international organizations.

LakeNet is an active member of the Maryland Association of Nonprofit Organizations and has adopted the Standards for Excellence: An Ethics and Accountability Code for the Nonprofit Sector.

