

Autumn 2019

Welcome to U.S. Biosphere Network News, a periodical newsletter providing summaries of notable domestic and international activities by biosphere reserves and partner organizations. Biosphere reserves are special places recognized by the international Man and the Biosphere Program (MAB) where people work locally to improve human livelihoods and conserve their natural and cultural heritage. Innovative approaches in biosphere reserves use science, education and socioeconomic analyses to maintain healthy lands and waters and sustain our quality of life.

Mammoth Cave Area Biosphere to Host Karst Workshop, May 2020

During May 18-22, 2020, karst experts from around the world will converge on Bowling Green, Kentucky for **UNESCO Karst 2020: Conservation of Fragile Karst Resources, A Workshop on Sustainability and Community**, sponsored by Western Kentucky University, the George Wright Society, and the Mammoth Cave Area Biosphere Reserve. The workshop will feature meetings, technical sessions, and field trips designed to enhance communication and spur collaborations among cave and karst scientists, educators, and managers.

Karst landscapes and aquifers are formed on soluble rock such as limestone, and produce unique geologic and hydrologic features, like caves, sinkholes, underground rivers and large springs. Karst aquifer systems also supply a significant part of the world's population with drinking water. Mammoth Cave National Park and the greater Mammoth Cave Area Biosphere Reserve will host field trips to explore the cave systems and iconic karst features of the area.

Organizers are inviting colleagues from CaveMAB, a cave and karst working group under the World Network of Biosphere Reserves (see cavemab.com), World Heritage Convention, Global Geoparks Network, International Association of Hydrogeologists and Geographical Union Karst Commissions, and the International Geoscience Program project IGCP#661 under UNESCO, among others. Organizers invite practitioners who work in caves in non-karst types of geologic environments to attend and contribute to discussions, as well.

Those interested in attending or proposing papers or sessions should go to:
www.unescokarst2020.com



Historic entrance to Mammoth Cave

Online Forum Launched

In spring 2019, the U.S. Biosphere Network launched a new online forum dedicated to communications and exchange of information among biospheres and partner organizations. The National Park Service Common Learning Portal hosts the forum where members can learn from their peers, post messages, ask questions, and share documents of interest. Current topics include *U.S. Biosphere Fact Sheet and Map*; *What's in a Name: Should we change it*; *Sister Park Arrangements*; and *Resources, Practices and Tools*.

Those interested in joining the forum should send an email request to the moderator, Cliff McCreedy at cliff_mccreedy@nps.gov.

Membership in the forum is open to those seeking to share knowledge and communicate with biosphere reserves and partner organizations.

Biospheres from U.S., Canada and Europe Huddle in Dublin

Dublin Castle, first founded as a major defensive work by the nobleman Meiler Fitzhenry on the orders of King John of England in 1204, was among the unique gathering places for EuroMAB 2019 in April. Approximately 230 individuals from over 35 countries, including nine from the U.S., attended the biennial meeting of 302 North American and European Biosphere Reserves.

According to U.S. Biosphere Network participants, many valuable connections with peers and pragmatic discussions focused on improving the economic, environmental, and social well-being of communities in biospheres, as well as maintaining their natural and cultural resources' integrity. The U.S. delegation of nine included:

Champlain Adirondack BR – Kelly Cerialo and Eric Holmlund, Paul Smith's College

Golden Gate BR – Karen Reyna, National Oceanic and Atmospheric Administration

Mammoth Cave Area BR – Lee Anne Bledsoe, Lily Hamm, and Emma Poole, Western Kentucky University

Southern Appalachian MAB Cooperative – Tommy Cabe and Joey Owle, Eastern Band of Cherokee Indians

Virginia Coast BR - Jill Bieri, The Nature Conservancy

Participants visited Dublin Bay Biosphere Reserve. Prior to the meeting, the U.S. Biosphere Network and Canadian Biosphere Reserve Association exchanged contact information for 20 U.S. and Canadian delegates, enabling them to meet informally over dinner.

A trip report on U.S. participation in EuroMAB 2019 is available on the U.S. Biosphere Network Online Forum or by contacting Lee Anne Bledsoe at lee.bledsoe@wku.edu.



EuroMAB attendees and Dublin Bay BR representative at Howth Head, a Special Amenity Area

Glacier Bay—Admiralty Island BR Accepted by MAB Council

To maintain their recognition by MAB, all biospheres in the World Network must submit Periodic Reviews on a 10-year cycle to demonstrate progress in meeting the MAB Program goals and criteria. NPS and the Estes Park Environmental Center co-sponsored a workshop in 2016 in Estes Park, Colorado to provide guidance and facilitate periodic reviews by all U.S. biospheres. The U.S. process has ultimately led to 28 biospheres submitting Periodic Reviews and 19 other biospheres electing to withdraw. (Under the MAB Exit Strategy, withdrawn sites may consider submitting a new nomination to MAB at any time.)

As part of their annual deliberations, delegates from 34 nations met from June 17 to 21, 2019 at the 31st session of the UNESCO MAB International Coordinating Council (ICC) in Paris to act on the status of periodic reviews, including the Glacier Bay – Admiralty Island BR submission. The ICC accepted the recommendation from the International Advisory Commission on Biosphere Reserves (IACBR) that the Glacier Bay – Admiralty Island Periodic Review meets the MAB criteria. The ICC also accepted minor revisions such as name changes and zoning maps from Yellowstone – Grand Teton, Virginia Coast, and Apalachicola (Florida) Biosphere Reserves.

Glacier Bay – Admiralty Island in Alaska was one of three U.S. periodic reviews still pending as of 2018, along with Organ Pipe Cactus, Arizona and University of Michigan Biological Station Biosphere Reserves. In September, Organ Pipe Cactus submitted its periodic review and requested a name change to Sonoran Desert Biosphere Reserve. The UM Biological Station also provided an update letter, draft periodic review and a requested name change to Obtawaing Biosphere Reserve. Both were submitted through the National Park Service and State Department, for consideration by the IACBR and action by the ICC in June 2020 in Lagos, Nigeria. A map of the 28 currently active biospheres is available at georgewright society.org/conservation or by contacting Cliff McCreedy at cliff_mccreedy@nps.gov.

Congaree Biosphere Intern Attends World Youth Forum

Ethan Shafron participated in the 2019 Man and the Biosphere (MAB) Youth Forum in Changbaishan Biosphere Reserve, China, September 15 – 18. The 2019 Forum's stated goal was to engage youth in contributing to discussions in preparation for the Convention on Biological Diversity Conference of the Parties 15 in 2020, and to encourage them to be "actors of change."

Ethan is a recent graduate of the University of Vermont in Environmental Studies. He is one of three interns who completed their Geoscientist-in-the-Parks (GIP) Internships at Biosphere Reserves over the summer 2019, working on planning, outreach and communications. Ethan worked in Congaree Biosphere Reserve, South Carolina. Big Thicket Biosphere Reserve in Texas hosted Alexis Scienczak who graduated from Gustavus Adolphus College, and Organ Pipe Cactus Biosphere Reserve in Arizona hosted Jonathan Olson, a graduate of St. Cloud University.

For more information on the GIP Internship Program, visit geosociety.org under Education and Careers-Field Experiences.

Biosphere Briefs

Southern Appalachian Man and the Biosphere Cooperative (SAMAB)

The Eastern Band of the Cherokee Indians and SAMAB recently agreed to a Culturally Significant Plant Species Initiative. The initiative encourages institutions across the southern Appalachian region to collaborate on conservation, access, utilization, and restoration of culturally important species, while respecting and acknowledging Traditional Ecological Knowledge (TEK) and the multigenerational connections to the Cherokee language and culture.

Champlain Adirondack Biosphere Reserve

As part of their studies for a class in Protected Landscapes and Community Sustainability, fourteen interdisciplinary students accompanied by two professors from Paul Smith's College are traveling to South Africa from January 7 – 17, 2020. The students will work with three South African Biospheres - Cape West Coast BR, Gouritz Cluster BR, and Kogelberg BR – in the context of the UN Sustainable Development Goals (SDGs).

Congaree Biosphere Reserve

On August 2, 2019 Congaree National Park hosted an outreach meeting to give voice to the community and discuss opportunities for stakeholders to collaborate on planning biosphere activities. The park also hosted a series of meetings in July to explore tourism, education, conservation, and science and other topics of mutual interest with organizations in the biosphere.

For More Information

For more information, or to submit updates and articles for our next newsletter, contact Cliff McCreedy, U.S. Biosphere Program Coordinator, at 202-513-7164, cliff_mccreedy@nps.gov