A Report of Activities
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Summary
Big Bend National Park hosted a week-long workshop with Mexican sister parks in August 2015 in partnership with the National Park Service Intermountain Regional Program, Mexico’s National Commission of Natural Protected Areas (CONANP), the NPS Chihuahuan and Sonoran Desert Monitoring Networks, the University of Arizona, Universidad Autonoma de Nuevo Leon, and the Arizona-Sonora Desert Museum. Andrew Rhodes and Ignacio Marsh from CONANP’s central offices in Mexico City, Carlos Sifuentes, CONANP’s Northeast Regional Director, and Big Bend NP Superintendent, Cindy Ott-Jones were present at the workshop. US National Parks included Big Bend National Park (TX), White Sands National Monument (NM), and Guadalupe Mountains National Park (TX). Mexican Protected Areas included Cuatro Cienegas, Maderas del Carmen, Ocampo, and Cañon de Santa Elena.

The primary goal of the workshop was to further develop collaboration between sister parks in Mexico and the U.S. through an exchange of ideas, approaches, and techniques of scientific monitoring, data management, and their application. This exchange of information provides an excellent opportunity to develop a binational report on the status of Chihuahuan Desert resources using expertise and programs represented in this workshop. The role of the Arizona-Sonora Desert Museum (ASDM) during this workshop was that of facilitating the meeting over five days, introducing participants, moderating conversations and coordinating the workshop and field trips, leading to the formation of a technical committee that will guide the binational report on the status of the Chihuahuan Desert resources.
This workshop allowed participants to accomplish a great deal, including sharing of vital sign monitoring protocols and results; field trips to practice and share monitoring techniques; presentations by all participating U.S. parks and Mexican protected areas; and both formal and informal discussions on invasive species, vegetation and water management and monitoring. The Southwest Border Resource Protection Program (SWBRPP) of the National Park Service funded this project.

Overview
Big Bend National Park, Guadalupe Mountains National Park, and White Sands National Monument have a long history of working relations with their sister parks. Following their long-standing interactions, Guadalupe Mountains National Park received funding from the Southwest Border Resource Protection Program to work together with White Sands National Monument, and Big Bend National Park on common natural resource issues, especially monitoring of vital signs and information sharing.

The Arizona-Sonora Desert Museum was invited to be a convener of this workshop, and actively facilitate the meeting, thanks to Sergio Avila’s prior experience working with sister parks on both sides of the U.S.-Mexico border. ASDM’s involvement included extensive participation during the organization of the workshop, and developing an inclusive meeting agenda. During the workshop, Sergio Avila introduced all participants, established the framework for workshop discussions, defined participants’ roles, meeting ground rules and guided the discussions in the conference room and during field visits.

About 30 biologists and managers from four Mexican protected areas and three national parks attended the meeting, in addition to staff from University of Arizona, Universidad Autonoma de Nuevo Leon, and the Chihuahuan Desert Monitoring Network. The workshop was conducted in English and Spanish, thanks to the participation of a professional translation service.
Meeting Results and Next Steps

The sister park monitoring workshop was a great opportunity for the continued collaboration between National Parks and Protected Areas in the Northeast region of CONANP. It was clear from the beginning that these parks have worked closely with each other for some time, and though individual challenges occur, their personal relations, trust and collaborative history help them overcome those challenges.

Big Bend National Park has a long history of working relations with its sister parks Maderas del Carmen and Cañon de Santa Elena. Moreover, during this meeting, Big Bend Superintendent and CONANP's Representatives held a private meeting to discuss the inclusion of the Ocampo Flora and Fauna Protected Area and the Natural Monument Rio Bravo del Norte to this group of sister parks. It seems to be in the best interest of both agencies to expand, improve, and strengthen this relationship. Similarly, the positive working relation between White Sands National Monument, and Cuatro Cienegas was made clear. The staff in these parks have visited each other and spent some time sharing information, monitoring protocols and research, and training staff members, which shows as a positive gain for the parks and the people that work there.

The sister park relationship between Guadalupe Mountains National Park and La Michilia Protected Area has seen many advances over the last five years. A number of challenges face this sister park relationship, including La Michilia being located within a different region of CONANP (not Northeast). During this workshop, La Michilia's personnel were unable to attend. As an outcome of this workshop, CONANP personnel committed to facilitating communications with La Michilia, as well as future attendance of their staff to regional planning, binational meetings and workshops.
Challenges
One difference between monitoring in National Parks and Protected Areas seen and discussed during the workshop was that the National Park Service has a mandate to implement continued monitoring without this being based on a specific need or goal. On the other hand, monitoring actions conducted by CONANP seem to be directed at answering management questions, especially in reference to the communities that live within those protected areas, and the use they make of resources (i.e. cattle grazing, firewood extraction). However, this difference in the monitoring goals did not directly impact the monitoring protocols being applied, for example for vegetation, water quality or invasive species.

Opportunities
The last day of the workshop, participants identified a smaller group of leaders who will follow up and continue organizing and facilitating these meetings. Two sources of funding were also identified to help supply funds for their future work: the National Park Service’s Southwest Border Resource Protection Program, and the U.S. Fish and Wildlife Service’s Wildlife Without Borders Program.

Notes
The binational workshop commenced on Monday, August 24 with a welcome address by Cindy Ott-Jones, Big Bend National Park Superintendent, whom also described the historic Sister Park relationship between Big Bend National Park and its Mexican counterpart.

Andrew Rhodes
General Director of Institutional Development and Promotion of CONANP addressed the group during the opening ceremony on behalf of National Commissioner Alejandro Del Mazo.

Michael Bozek
NPS Intermountain Region Inventory and Monitoring Program Manager with base in Colorado, introduced the “State of the Chihuahuan Desert” as a framework for workshop participants to develop a living document that will be produced collaboratively in the future. Afterwards, workshop participants worked in breakout groups to identify common monitoring interests, protocols and techniques.

David Larson
Chief of Resource Management of Big Bend National Park and workshop host (top) describes the logistics for the field trips. Sergio Avila of the Arizona-Sonora Desert Museum (bottom) facilitated and moderated conversations at the conference room and in the field.

On Wednesday we conducted a field trip around the Panther Junction area, where staff from the different sister parks shared and discussed monitoring protocols, including vegetation, invasive species, and weather and climate.

On Thursday’s field trip to the Rio Grande Village area of Big Bend NP, participants observed and practiced the monitoring protocols for streams and springs, analyses of surface and ground water and vegetation and bird communities.

During the field trip to the Rio Grande Village, Dr. Gary Nabhan of the University of Arizona Southwest Center talked about Monarch butterfly conservation efforts, propagation of milkweeds and other native plants and opportunities to connect citizen science, habitat enhancement and conservation actions to favor the migratory phenomenon of Danaus plexippus, in Mexico and the U.S.

On the last day of the workshop, a team was formed to lead and follow up on next steps and actions, including the drafting of the State of the Chihuahuan Desert report. The team was led by Michael Bozek (NPS, Intermountain Region) and included representatives of all different parks and protected areas, Ignacio March of CONANP’s central offices in Mexico City, Marcia Wilson of the Chihuahuan Desert Monitoring Network, and Dr. Rogelio Carrera of Universidad Autonoma de Nuevo Leon. The five primary natural resources shared between sister parks and identified during the workshop as the main components of the Chihuahuan Desert report include water (surface and groundwater), climate change, threatened and endangered species, animals of special interest, and invasive species, such as the cactus moth.
Workshop participants enjoyed the sunset and a barbeque offered by Big Bend NP staff at the Chisos Mountains Campground. This was an opportunity to meet each other, and share their work experiences and also share some treats made with natural ingredients like agave, cheese, quince, and many other items.

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