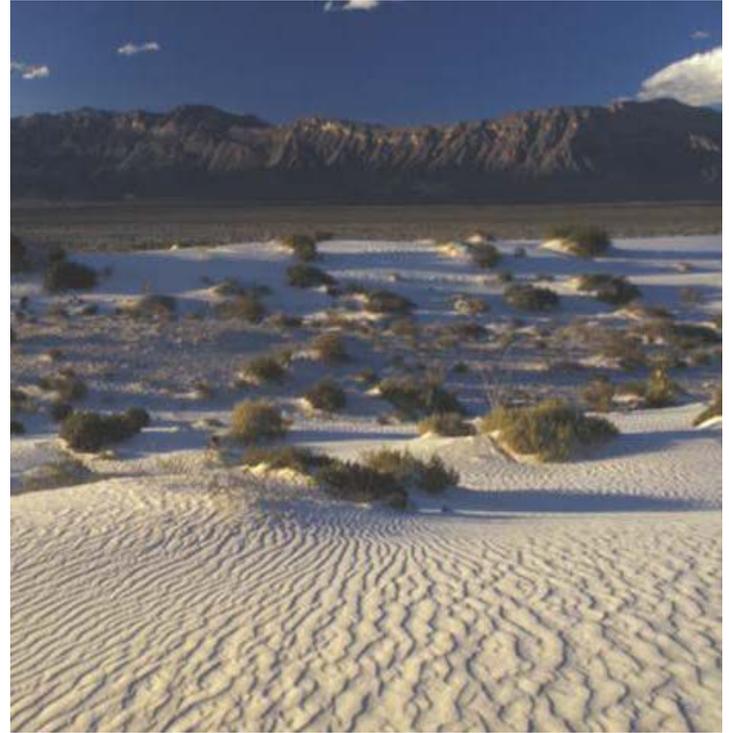


White Sands and Cuatrociénegas, a Successful International Cooperation Experience



Cuatrociénegas



White Sands



Abstract

Over the years, many international cooperation agreements between protected areas have been signed. However, the success stories are quite scarce, due to a number of factors. In many cases the partnership objectives were not clearly established, the momentum was slowed, and the central or regional offices support lost. In some cases the agreements were not able to subsist in the government transition from one period to another and all the achievements and cooperation efforts were lost. Along with the previous reasons the bureau requirements, and the complicated visa process, overpowered the initial enthusiasm of many new partnerships.

To achieve the partnership between White Sands National Monument and Flora and Fauna Protection Area (APFFC) Cuatrociénegas, the first step was clarifying the cooperation objectives in order to benefit both sides of the sister park partnership. These objectives were mutual training, sharing common species and ecosystems monitoring protocols, initiation of an endemic species joint research project, developing financial strategies for collaboration, sharing exotic and invasive species control strategies, and sharing and developing interpretation and educational material.

In a very short time we have had remarkable achievements with the cooperation partnership for both parks. We believe sharing this experience would be helpful to other initiatives and partnership processes in the future.



NPS visit to Cuatrociénegas



**Cuatrociénegas comes to
White Sands**

Introduction

Within recent years there have been several official and unofficial initiatives between the USA and Mexico related with the conservation of the natural resources. One of the first attempts was made in 1935 between presidents Roosevelt and Cardenas. The intention was to create an international peace park close to the border (INE, 1997; Simonian 1999). This park was never made, but recently there have been several initiatives to enhance the cooperation between both nations. A Letter of Intent for Joint Work in Natural Protected Areas on the United States-Mexico border was signed at Mexico City, May 5, 1997. In May 18, 2000, a Memorandum of Understanding was signed between the Secretariat of the Environment, Natural Resources and Fisheries (SEMARNAP) and the Department of Interior to work jointly in matters related to the protection and conservation of the environment. The same day another agreement on Cooperation in Management and Protection of National Parks and other Protected Natural Areas was signed between the SEMARNAP and the National Park Service (NPS).

On March 23rd, 2006, National Commission for Natural Protected Areas (CONANP) and the NPS, recognizing the former agreements, established and signed the Joint Declaration of Sister Parks Partnership. In this document 9 Protected Areas from Mexico and 9 USA National Parks, were declared sister parks. Among these were Cuatrociénegas Flora and Fauna Protection Area (APFFC) and White Sands National Monument (WSNM). Both areas are inside the Great Chihuahuan Desert and make up the world's largest gypsum dune fields.

In 2008, regional and federal authorities from Mexico and the USA, directors and superintendents of the parks and protected areas mentioned in the 2006 Declaration met at Grand Canyon National Park, in order to establish details for the Sister Parks Partnership process. In this meeting, the first joint visits were arranged which were support with translation and transcription services from New Mexico State University.

This is the binational context that preceded the partnership between WSNM and APFFC.

Past experiences have taught us that in most cases, the sister parks partnership process remains idle. At national or regional levels and only a few make it to fruition. Therefore, success stories are quite scarce, and when parks manage to accomplish the process, the results are poor. We believe that the main reason they fail is the lack of clear and realistic cooperation objectives. When objectives are not clear, it is very difficult to persuade central and regional offices to support the process and in turn leads to financial implications. Another problem to face is the cost. International travel is expensive and requires money and a lot of paperwork within the environmental agencies and the migratory authorities. This complicated paperwork sometimes deflates the initial enthusiasm and in some cases, it breaks

down the whole process. This report summarizes how the sister park partnership has helped to accomplish joint actions, results, and mutual benefits for both WSNM and APFFC.

Methods

Cuatrociénegas Flora and Fauna Protection Area (APFFC) and White Sands National Monument (WSNM) are 750 kms away from each other. Despite this, both share much more than just gypsum dunes fields. Both are located in basins surrounded by mountains. WSNM lies in the Tularosa Basin and APFFC lies in the Cuatrociénegas valley. The geologic processes that form the gypsum dunes are very similar. Dissolved minerals in water are pulled to the lower part of the basin and steadily the concentration increases in shallow lakes. This happens as well in Lake Lucero in WSNM and in Laguna Churince in APFFC. With high temperatures and low air humidity, the water starts to evaporate and the mineral crystals are deposited forming a crust that slowly breaks down until the particles are small enough to be moved by air. This is how the dune fields are formed in both places. There is a big difference though, between the dune fields. In WSNM and surroundings, the gypsum covers almost 800 square kilometers. In Cuatrociénegas the dune field is small, only 0.8 square kilometers. Nevertheless the size difference, both places share a lot of common species and ecosystems and both are inside the Great Chihuahuan Desert. So far, we have detected 129 shared vertebrate animal species without counting amphibians and fishes. This represents almost 33% of all the present species in both places. If we consider this number separately, WSNM shares 40% of the species it has with APFFC, and APFFC shares with WSNM more than 60% of the animal species it has. In the gypsum soils within both parks incredible paleontological resources have been found within recent years.

Endemic mascots of the gypsum Islands



Cuatrociénegas Box Turtle



White Sands Bleached Earless Lizard

Mutual visits have allowed for the discovery of similarities and differences between both parks and, therefore, the potential of the partnership has unfolded. This has allowed us to establish joint work and clear objectives. The first visit was made to White Sands National Monument and later to Cuatrociénegas Flora and Fauna Protection Area. From these visits, we established the goals and objectives of the partnership as follows:

1. Share and develop both Parks Environmental Vital Signs.
2. Renew the former training agreement between WSNM and the APFFC. Work on a Joint proposal.
3. Invite an APFFC employee to a training program in WSNM, in order to be trained and help the Park as volunteer in the Hispanic outreach program. The volunteer period could be from 1 up to 3 months. This agreement, with short term results, could be helpful in the negotiations with both, Mexico and USA Central Offices.
4. Make a joint presentation in the (WSNP) George Wright Conference. Spring, 2011.
5. Make a joint presentation in the Congreso Mexicano de ANP. Date not determined yet.
6. Look for a Ph D Student to work in one of our common concerns (invasive plants, dune dynamics, endemism, or others).
7. Look after the chance to train one or two people in Albright or Las Cruces.
8. Ask people from La Jornada, to train our staff in grassland management, cattle, and other similar subjects.
9. Generate information to help the public become aware of the sisterhood of the Parks. The suggestion is an internet link or a place for the Sister Parks in each web site.
10. Generate and use 3D images to attract children to the Parks.
11. Analyze the best mechanism to financially support shared projects.
12. Celebrate or create the Dune's Day, as well as the Sisterhood Day for both Parks. Make a common activities program, focusing on environmental education with kids. It's important to consider the evaluation of each activity (before and after). One activity could be the kids interchanging of boxes.

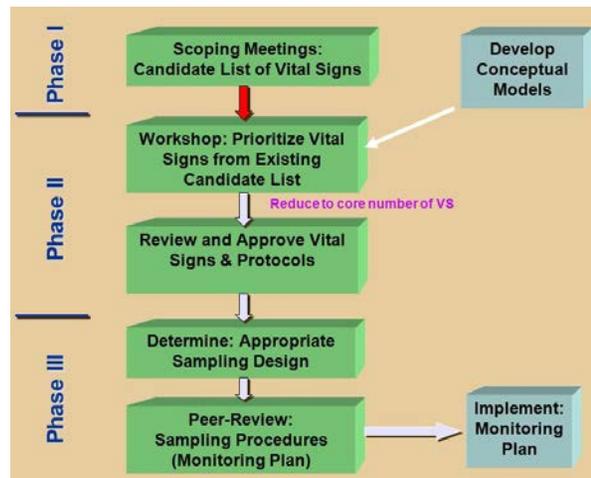
13. Create an internet link in the WSNM web site, with a visitor's registration system.
14. Include in the Garabatal Magazine an article on WSNM and the partnership.
15. Share by e-mail, materials and documents
16. Design and build signs or notices including information of the partnership between both parks.

We tried to establish realistic but broad objectives, with a leveled cost/benefit ratio that might result in clear and measurable benefits.

Vital Signs meeting at WSNM



Vital Signs Flow Chart



Results

To date, we have accomplished 10 out of 16 agreements. Two of them, particularly important:

- One APFFC employee visited for a full month White Sands National Monument. The NPS provided housing, food, paperwork advisory, help in setting the meetings with scientists and traveling expenses. During the visit the joint research project was developed, bilingual educational and information material were developed were Latin visitors attended, the employee was trained in vital signs monitoring and meetings with specialists and scientists took place. Most of the accomplished agreements were completed during the visit.

- The financial support for the joint research was approved. The National Park Service obligated funds to the University New Mexico to research arthropods in both parks. Arthropods are one of the Phylum with less research in the parks, and by far, the most vast and numerous of all. The main goals of this project was finding new endemic species and creating an inventory of the present species in the parks. The research includes 15 Insect orders, 3 Brachiopod orders, 3 Malacostrata orders and the Chilopoda and Diplopoda Classes.



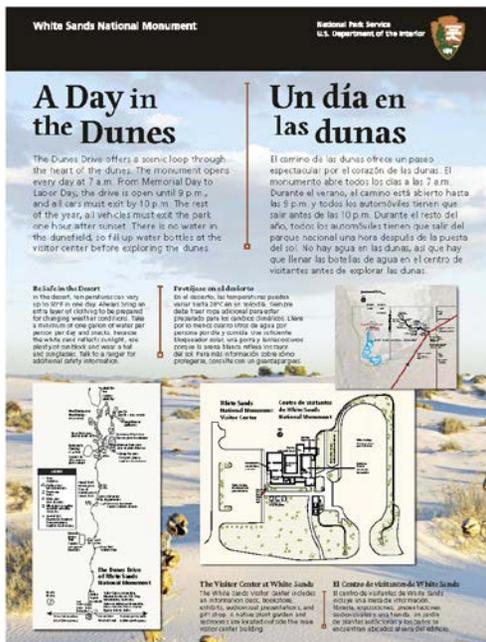
APFFC employee (Manuel Martínez) helping with mammal survey at WSNM



Manuel Martínez assisting with Lake Lucero tour at White Sands

Beside the former achievements, the following have been reached as well:

- The regional NPS office shared with the APFFC the procedures and methods to develop the ecosystem vital signs monitoring protocol. This included numerous interviews with scientists from different specialties and a 2010 Vital Signs workshop held at White Sands and attended by APFFC.
- Personnel from La Jornada experimental ranch were visited, and a visit was scheduled for the US Department of Agriculture to visit Cuatrociénegas in order to train employees and farmers in sustainable ranching and grassland management.
- WSNM shared 3D educational material to use for environmental interpretation and educational purposes.
- Sharing of documents and information for geology, biodiversity and management strategies from one place to another helped to detect collaboration opportunities for the partnership process.
- Publication of different bilingual materials on the partnership: An article in the Garabatal magazine explaining the partnership process, triptychs to share with visitors the differences and similarities of the sister parks, side bulletins with general information about both places, translation to Spanish of the WSNM information brochure for Latin visitors and 2010 translation and transcription for the monuments new museum exhibits.
- In April of 2012 a representative from Cuatrociénegas came to WSNM to assist the monument with the Spanish translation of all park signs.
- 20 signs and signals have been installed in public places of Cuatrociénegas with information on the Sister Parks Partnership



New bilingual interpretive signs at WSNM

Conclusions

Since the establishment of our stistehood we have had many achievements in resource management, interpretation, and research collaboration, but there is still much to be accomplished. The results and successes are due to the willingness and interest in both sides to make this process succeed, and develop a fruitful relationship between Protected Areas in Mexico and the US. This story of success involves many and support from multiple levels. From the park personnel, to the regional and central offices; the joint efforts have paid off. We invite everyone who might be interested in knowing more about this partnership and hope this experience will be helpful to developing other initiatives and sister park partnerships in the future.

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