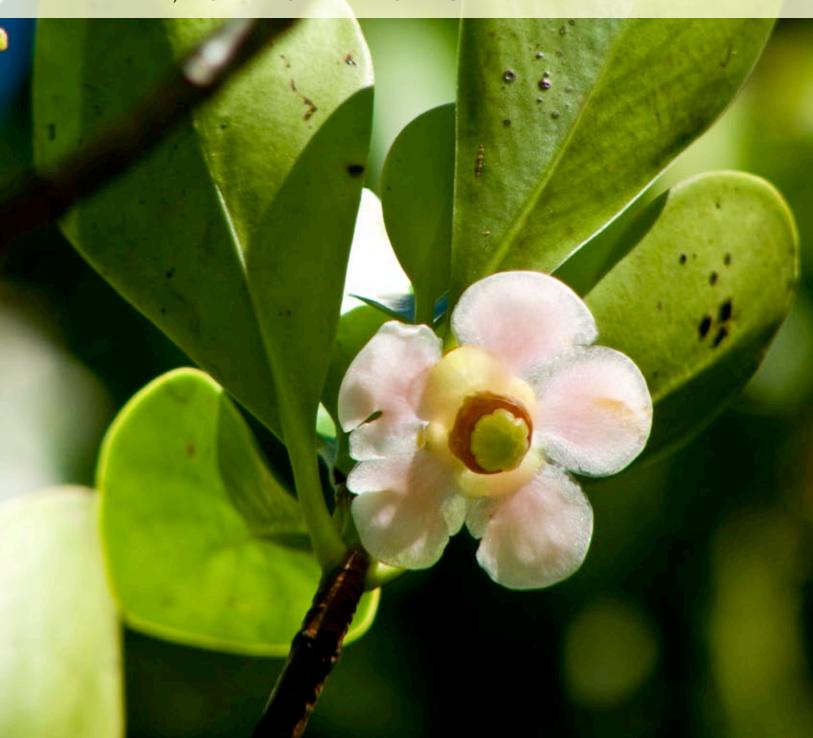
# PADRE NUESTRO TRAIL PARQUE NACIONAL DEL ESTE

RECOMMENDATIONS FOR IMPROVED INTERPRETATION AND SIGNAGE BAYAHÍBE, DOMINICAN REPUBLIC



#### **TECHNICAL REPORT**

# PADRE NUESTRO TRAIL PARQUE NACIONAL DEL ESTE

# RECOMMENDATIONS FOR IMPROVED INTERPRETATION AND SIGNAGE BAYAHÍBE, DOMINICAN REPUBLIC

Ву

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In collaboration with

La Romana-Bayahíbe Hotel Association Parque Nacional del Este US Peace Corps

Dominican Republic, October 2008







**DR-CAFTA** 

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### **TABLE OF CONTENTS**

INTRODUCTION	2
Padre Nuestro Trail Background	2
Current Tourism Situation	2
Fieldwork	2
SWOT RAPID ASSESSMENT	4
HERITAGE INTERPRETATION	6
Objectives	6
Interpretive Thematic Messages	6
NEW INTERPRETIVE AND MARKETING PRODUCTS	7
RECOMMENDATIONS	8
Trail Design, Infrastructure and Management	8
Signage and Interpretation	8
Marketing and Souvenirs	8
Table 1. SWOT Rapid Assessment	4

Figures		
Figure 1. Pag	dre Nuestro Trail location	2
Figure 2. Parque del Este location		2
Figure 3. Pag	dre Nuestro Trail map	3
Figure 4. Sur	mmary of recommended new signs and verbal interpretation topics by guides	5
APPENDIX	<u> </u>	
EXAMPLES	OF INTERPRETIVE AND MARKETING PRODUCTS	
DEVELOPE	D FOR PADRE NUESTRO TRAIL	9
Product I	Site Map "Sendero Padre Nuestro"	10
Product 2	Welcome Banner "Sendero Padre Nuestro"	11
Product 3	Location Banner "Sendero Padre Nuestro"	12
Product 4	Rack Card "Padre Nuestro Trail"	13
Product 5	Bookmark "Padre Nuestro Trail"	15
Product 6	Padre Nuestro Trail Multimedia	16
Product 7	Padre Nuestro Trail Photos	17
Product 8	Padre Nuestro Trail Marker	18
Product 9	Logos	20

#### INTRODUCTION

#### PADRE NUESTRO TRAIL BACKGROUND

The Padre Nuestro Trail, located near the coastal community of Bayahíbe on the southeast coast of the Dominican Republic (Figure 1), was developed in 2007 as part of a USAID-funded program to relocate the community of Villa Padre Nuestro damaged by Hurricane George in 1998. At that time, 183 families (most of whom had worked as laborers constructing nearby tourism resorts), were living under primitive conditions and degrading the aquifer that provided water to most of the eastern part of the island. Pollution from outhouses and animal waste, hunting and deforestation from charcoal production and gardening were causing negative environmental impacts. Subsequently, over 1,000 individuals were moved to more modern housing about 13 kilometers away from this location. In 2002, eight square kilometers encompassing this trail were included within the legal boundary of the Parque Nacional del Este (Figure 2) and in early 2008 the Padre Nuestro Trail was inaugurated (Figure 3). A guide association was formed, partially as a means to give meaningful employment and to improve the economic status of the displaced families and partially as a means to help provide for long-term protection of the site.

Trail management objectives were established to help guide the trail development and future activities. The overall management objectives of the trail are to: I) provide a high-quality recreational experience that connects visitors to the park in a safe and enjoyable way, 2) provide environmental education for local and international visitors, and 3) protect the environment, and promote sustainable economic development for guides and local tour businesses.

Figure 1. Padre Nuestro Trail location.





Cactus and dry forest vegetation commonly seen along the trail.

#### **CURRENT TOURISM SITUATION**

Tourism developments associated with the trail include construction of a open-air visitor center (i.e. Kiosk) with seven informational signs, restroom facility (soon to be completed), signs identifying selected plants and trees along the trail, a Spanish and English brochure (IIxI7 inches), and a large metal sign interpreting the historic charcoal manufacturing site.

Presently about 150 people visit the trail each week. Nearly all of them go directly to the Chicho II cave to swim and do not utilize the trail, nor the services of the local guides. The local guide association is currently negotiating with the park to offer guided tours on the trail. The park entrance fee is 300 pesos (about US\$3) and the proposed guide fee would be an additional 300 pesos.

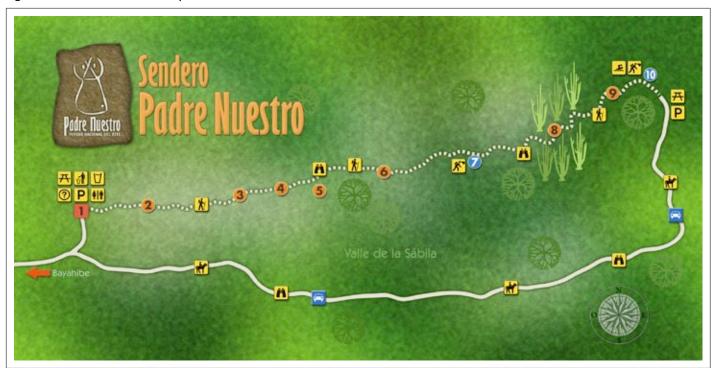
#### **FIELDWORK**

A US Forest Service team visited the trail on October 17 and 18, 2008 to conduct this assessment and to gather data to use as a case study in the USAID/CAFTA/US Forest Service sustainable tourism training short-course to be held later in the week. Under the direction of Jerry Bauer, the assessment team was comprised of Jerry Bauer, Bienva Bauer, Jerry Wylie, and Jorge Paniagua, with assistance from Peace Corps Volunteer Dilana Pickett. The team visited the trail for a rapid assessment and had discussions with Kelly Schaun, Executive Director of the La Romana-Bayahíbe Hotel Association which is the major sponsor of this trail. Graphic designs were developed by Jorge Paniagua.

Figure 2. Parque del Este location.



Figure 3. Padre Nuestro Trail map.



KEY			
I	Centro Interpretativo	6	La Carbonera
2	Antigua Comunidad de Padre Nuestro	7	La Cueva De La Lechuza
3	Jardín de Guayiga	8	El Bosque de Cactus
4	Árbol de las Orquídeas	9	El Árbol Patas Arriba
5	Bomba de Agua	10	La Cueva y El Manantial Chicho I & 2

Recorrido	1.9 kilómetros • 1.2 millas
Tiempo	1.5 a 2 horas
Nivel de Dificultad	Moderada



Early morning moon over the trail.



Common plant found along the trail.

#### **SWOT RAPID ASSESSMENT**

A quick analysis of the area's Strengths, Weaknesses, Opportunities and Threats (SWOT) was conducted as a first step of this assessment. Table 1 summarizes this SWOT.

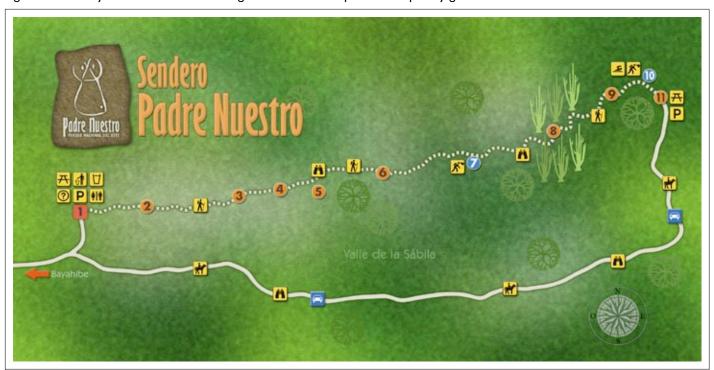
Table 1. SWOT Rapid Assessment

STRENGTHS	WEAKNESSES
<ul> <li>Close proximity to Bayahíbe resorts</li> <li>Attractive setting</li> <li>Environmental diversity</li> <li>Caves with springs</li> <li>Wildlife watching (Birds and butterflies)</li> <li>Taino petroglyphs</li> <li>Existing tourism infrastructure</li> </ul>	<ul> <li>Lack of marketing</li> <li>Unfocused interpretation</li> <li>Lack of integrated planning for signage</li> <li>Intrusive sign at charcoal manufacturing site</li> <li>Awkward trail design</li> <li>Lack of toilets at Chicho caves</li> <li>Only one trail option</li> <li>Unsafe trail conditions in Chicho II cave</li> </ul>
OPPORTUNITIES	THREATS
<ul> <li>Interpretive guided tours</li> <li>Additional trails (shorter to meet visitor needs)</li> <li>Sale of local souvenirs and drinks</li> <li>Training and capacity building for guide association members</li> <li>Micro business development</li> </ul>	<ul> <li>Loss of scenic quality due to poor planning and sign placement</li> <li>Water pollution due to contamination from swimming and human waste</li> <li>Injuries due to falls</li> </ul>

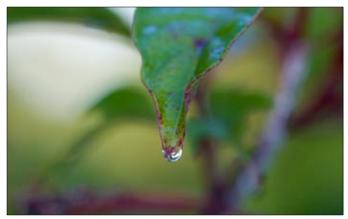


Assessment team looking for Taino petroglyphs in a limestone cave.

Figure 4. Summary of recommended new signs and verbal interpretation topics by guides.



	VERBAL INTERPRETATION	SIGNAGE & NON-PERSONAL INTERPRETATION
I	Welcome & introduce Thematic Message	Welcome panel, Trail map & Regulations
2	Villa Padre Nuestro story	
3	Guayiga use	
4	Tropical Dry Forest	
5	Pump station & aquafer	
6	Charcoal & deforestation	Charcoal site photo & explanation
7	Karst limestone & cave formation	
8	Cactus & limited surface water	
9	Forest resiliency to storms	Upsidedown Tree graphic
10	Caves named for Mr. Chicho	Chicho's house photo
	Aquafer & Taino use of caves	Petryglyph photos & Cave graphic
11	Conclusion: Restate Thematic Message & "Thanks"	Welcome panel, Trail map & Regulations



Early morning dew dripping from leaf.



Caterpillar found on a young stem.

#### HERITAGE INTERPRETATION

Interpretation is more than just presenting information. It is about revealing hidden meanings and helping make connections between visitors and this site. In addition to having a central thematic message, it must be interesting, personally relevant, organized and have a purpose. We must answer the question "What do we want people to DO with this information...or how do we want them to RESPOND?" These responses can be intellectual (learning), emotional (feeling) or behavioral (action).

#### **OBJECTIVES**

Possible objectives for interpretation and visitor information for the Padre Nuestro trail include the following:

#### Intellectual

- Understand the importance of karst topography (key thematic message)
- · Understand why the community was moved
- Understand a tropical dry forest
- Know what the trail is and where it is located
- · Know how and why the Taino used springs
- Know that water used by the local population and tourist hotels comes from this aquifer

#### **Emotional**

- Appreciate the beauty and the environmental diversity of the forest
- Respect the natural environment
- Respect the effort and sacrifice of the residents who were displaced
- · Enjoy and appreciate the trail and underground spring

#### **Behavioral**

- · Visit the trail with an official guide
- Pay the park entrance fee and the guide fee
- Follow all park regulations
- Practice water conservation in hotels

#### **INTERPRETIVE THEMATIC MESSAGES**

After visiting the trail and the surrounding area, the assessment team determined that the primary topics for interpretation include nature, history and water.

The proposed central thematic message that links all three topics is "Limestone 'karst' topography shapes our lives." This includes not only our lives today, but the importance of karst topography --its caves and underground aquifers-- on the lives of prehistoric inhabitants, as well as how plants and animals have adapted to this particular environment. This key idea will help organize the entire interpretive program.

This primary "take-away" message is supported by the following six sub-themes:

- I. The Villa Padre Nuestro community was built over a fragile aquifer and was relocated.
- Karst topography has caves and springs but no surface water.
- 3. Traditional activities such as charcoal production has altered the landscape.
- 4. This resilient forest is recovering from deforestation and hurricanes.
- 5. Prehistoric Taino inhabitants used caves and springs for drinking water and rituals.
- 6. This aquifer is a primary source of water for most of the eastern part of the island.

Suggested locations for presenting each of these sub-theme messages is shown in Figure 4. This can be done through signage and verbal presentations by guides.



Assessment team walking the trail.

#### **NEW INTERPRETIVE AND MARKETING PRODUCTS**

Several draft designs were developed for interpretive banners and marketing materials for Padre Nuestro Trail. These current products are illustrated in Appendix I. Future products that could be developed are identified in the recommendations.

#### Product I

#### Site Map "Sendero Padre Nuestro"

This is a redesigned trail map, using the original trail map and current information from Google Earth. This map shows the points of interest along the trail and uses international symbols (instead of text) to identify services, facilities and special features.

This map is provided as an electronic file, in the original Adobe Photoshop format and as a jpeg format. The original file can be printed in any size needed on banners, fliers, brochures, etc. for future use.

#### **Product 2**

#### Welcome Banner "Sendero Padre Nuestro"

This banner was designed to be used as the primary "Welcome" sign at the Visitor Kiosk. It is designed to be about  $36 \times 80$  inches in size. It is provided as an electronic file, in the original Adobe Photoshop format and as a jpeg format. The original file can be printed in any size needed on banners, fliers, brochures, etc. for future use.

We recommend that a  $36 \times 80$  inches banner be printed on plastic vinyl and be placed at the Visitor Kiosk.

#### **Product 3**

# Location Banner "Sendero Padre Nuestro" Explore Naturaleza, Historia y Agua

This banner was designed to be used as the primary sign for the visitor to become oriented to their location and what they can expect to see and do on the trail. It is designed to be about 36 x 80 inches in size. It is provided as an electronic file, in the original Adobe Photoshop format and as a jpeg format. The original file can be printed in any size needed on banners, fliers, brochures, etc. for future use.

We recommend that a  $36 \times 80$  inches banner be printed on plastic vinyl and be placed at the Visitor Kiosk.

#### **Product 4**

## Rack Card "Padre Nuestro Trail" Explore Nature, History & Water

The "rack card", 4 inches x 9 inches in size, is designed as a marketing tool, to advertise the trail and the adventure at local tourist hotels. It is a double sided card which provides basic site information and a location map. It should be printed on heavy paper stock and placed in all hotels and airports in the area.

It is provided as an electronic file, in the original Adobe Photoshop format and as a jpeg format. It is ready to print.

#### **Product 5**

#### **Bookmark**

#### Explore Nature, History & Water

The bookmark, 2 inches  $\times$  9 inches in size and one sided, is designed to be used as a tool to help raise awareness and funds for the guide association. This item can be printed on heavy stock paper and/or laminated and sold at souvenir shops and hotel gift shops. In the US and Puerto Rico similar items sell for up to \$3 per unit.

It is provided as an electronic file, in the original Adobe Photoshop format and as a jpeg format. It is ready to print.

#### **Product 6**

#### Padre Nuestro Trail Multimedia

A multimedia slide show was developed about the Padre Nuestro Trail. This MM product is about 4 minutes long and can be played by any DVD player, it can be used as a tool to help raise awareness about the trail, as an educational tool in local communities, and also could be sold as a souvenir in gift shops.

The Master CD of this product is provided. It can be reproduced as may be needed.

#### **Product 7**

#### **Padre Nuestro Trail Photos**

The original high-resolution photographs used in all the developed products are provided on a CD so they can be used on future products and educational programs. These are provided as high-resolution jpeg files.

#### **Product 8**

#### **Padre Nuestro Trail Marker**

A trail marker, using the Padre Nuestro logo, was designed to be placed at strategic locations along the trial. This marker will assist the visitor with identifying the trial location and will not be intrusive as a larger sign or marker. In addition this marker can be produced by local artisans, providing employment and pride in ones work and community. It could also be produced on a smaller scale and sold as a souvenir to tourists.

We recommend a 4 x 8 inches trail marker.

#### **Product 9**

#### Logos

As part of these products the Padre Nuestro logo was redrawn in a high-resolution, electronic file. The original file is provided, it can be printed any size as may be needed on any product.

We recommend that this logo be TradeMark so it is protected for exclusive use of the guide association.

Several other logos that may be of use for materials development are also included in electronic format.

#### **RECOMMENDATIONS**

The existing trail and Visitor Information Kiosk are a very good start and an excellent foundation for building a high-quality visitor program. However, the following recommendations are provided to address the important limitations and opportunities identified in the SWOT rapid assessment and to improve trail management and visitor satisfaction. These do not have to be implemented immediately or concurrently, but should be considered as funding and technical assistance become available and as existing infrastructure requires replacement.

## TRAIL DESIGN, INFRASTRUCTURE AND MANAGEMENT

- Convert the gravel road from hiking trail to vehicle and horse access to the Chicho II cave and for bird-watching.
- Install bathroom facilities close to Chicho II cave.
- Install a new Visitor Information Kiosk or signs at Chicho caves parking area.
- Develop one or two short loop trails feeding from main trail for those visitors that hike the entire trail. These could start at Visitor Information Kiosk and at the Chicho caves parking area.
- Do not develop a new kiosk or large, intrusive signs along the trail. Keep the trail rustic and natural and let the guides present as much of the interpretive message as possible. The exceptions are those sites that require special photographs or graphics to illustrate their story. These include the charcoal site, town site, upside-down tree's original location, and petroglyphs that cannot be easily seen. See Figure 4 for recommendations on verbal interpretation locations and signage & non-personal interpretation locations.
- Control access of local tour guides, tour companies and hotels who are currently using the site and not paying park entrance or guide fees.

#### SIGNAGE AND INTERPRETATION

- Shorten the name to just "Padre Nuestro Trail." The words "archeology" and "environmental" are unnecessary and distract from the central interpretive message.
- Redesign information panels at the Visitor Information Kiosk to include interpretation, not just information.
- Limit amount of text on signs and use more graphics and photographs.
- Add a banner at the Visitor Information Kiosk to include the newly designed trail map with points of interest.
- Design a "Welcome" banner at Visitor Information Kiosk with logos and general information and eliminate this redundant information from all other signs and information panels.

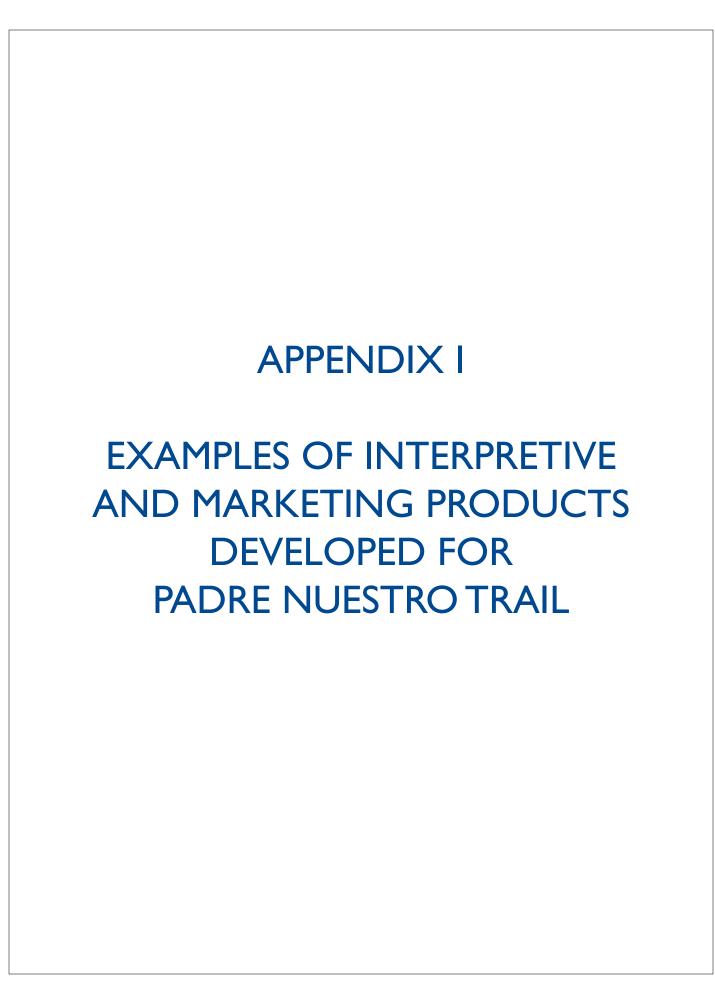
- Replace the existing large metal sign at the charcoal production site and move it to a better location where it does not encourage visitors to walk across the site and does not block the view. Use a rustic wooden sign frame.
- Develop a simple interpretive sign at the old town site overlook that includes a photograph of the original houses.
   Use a rustic wooden sign frame (no roofed kiosk).
- Develop a standardized interpretive talk for tour guides utilizing each of the 10 points of interest along the trail. This should be based on the central thematic message outlined above and be supported by the 6 sub-themes.
- Mark the trail location with 10-15 rustic wooden trail markers featuring a carving of the Padre Nuestro logo. These can be nailed to existing trees or to simple wooden posts.

#### **MARKETING AND SOUVENIRS**

- Develop marketing materials to attract visitors, such as rack cards.
- Develop souvenir products that can be sold to raise funds for guide association, such as bookmarks, posters, post cards, screen savers, etc. See "New Interpretative and Marketing Products" on page 7 and Appendix I for some ideas and suggestions. Items #5, #6 and #7 can all be marketed as souvenirs in gift shops.
- Sell refreshments, water and souvenirs at the Chicho Caves parking area.
- Develop site tours from specific hotels.
- Create a simple website to advertise the site. Include the trail and location map shown on the rack card, along with high-quality photographs of attractions and a short history of the project. Also indicate how visitors can make arrangements for tours (contact hotels).

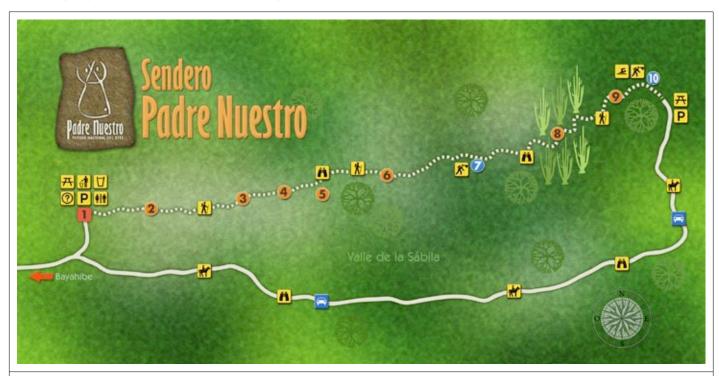


Assessment team inside the Chicho II cave.



#### Product I Site Map "Sendero Padre Nuestro"

• Site map, high resolution electronic files developed



KEY			
I	Centro Interpretativo	6	La Carbonera
2	Antigua Comunidad de Padre Nuestro	7	La Cueva De La Lechuza
3	Jardín de Guayiga	8	El Bosque de Cactus
4	Árbol de las Orquídeas	9	El Árbol Patas Arriba
5	Bomba de Agua	10	La Cueva y El Manantial Chicho I & 2

Recorrido	1.9 kilometros • 1.2 millas
Tiempo	I.5 a 2 horas
Nivel de Dificultad	Moderada

# Product 2 Welcome Banner "Sendero Padre Nuestro"

- Size: 36 x 80 inches
- Recommended to be locally printed on vinyl canvas.
- Note: All logos go on this banner and not on any other banners at Visitor Information Kiosk. Logos included on this example banner are concept only, local managers need to review and change as may be needed.



#### Product 3 Location Banner "Sendero Padre Nuestro" Explore Naturaleza, Historia y Agua

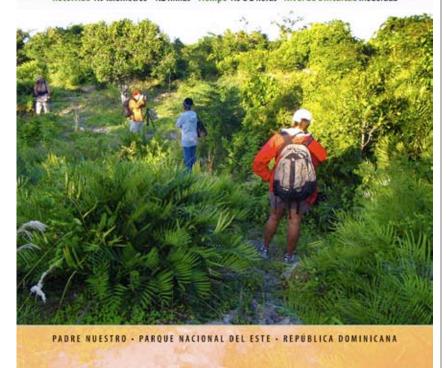
- Size: 36 x 80 inches
- Recommended to be locally printed on vinyl canvas.

# Explore Naturaleza, Historia y Agua Sendero Podre Nuestro

- 1 Centro Interpretativo
- 2 Antigua Comunidad de Padre Nuestro
- 3 Jardin de Guayiga
- 4 Árbol de las Orquideas
- 5 Bomba de Agua

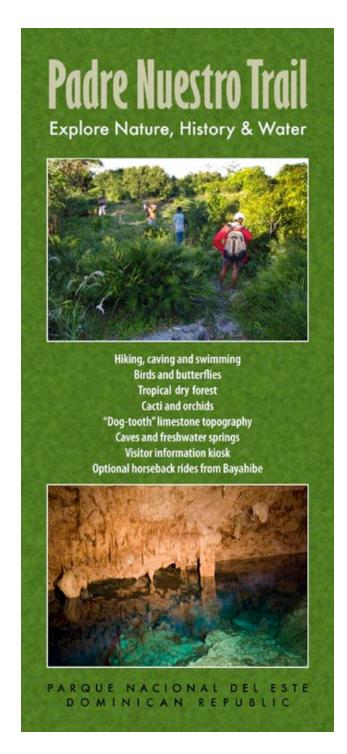
- 6 La Carbonera
- 7 La Cueva De La Lechuza
- 8 El Bosque de Cactus
- 9 El Árbol Patas Arriba
- 10 La Cueva y El Manantial Chicho 1 & 2

Recorrido 1.9 kilometros • 1.2 millas • Tiempo 1.5 a 2 horas • Nivel de Dificultad Moderada



# Product 4A Rack Card "Padre Nuestro Trail" Explore Nature, History & Water

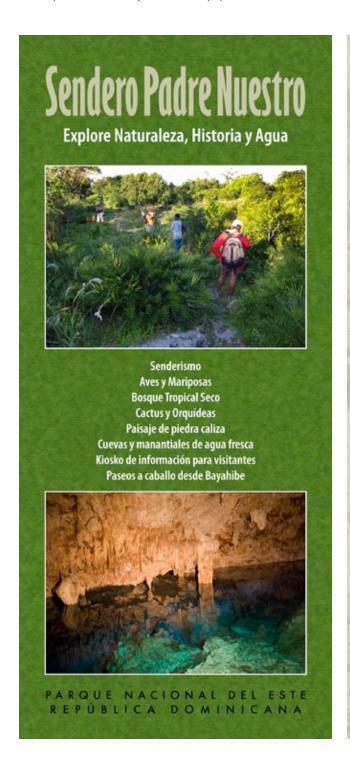
- 4 x 9 inches
- To be printed on heavy card stock paper



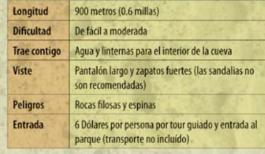


# Product 4B Rack Card "Padre Nuestro Trail" Explore Naturaleza, Historia y Agua

- 4 x 9 inches
- To be printed on heavy card stock paper



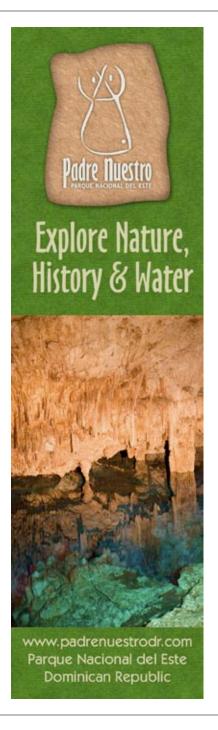
#### Disfruta del Sendero Padre Nuestro . . . Toma un tour quiado de una o dos horas y observa un bosque tropical seco, una paisaje de piedra caliza, mariposas y aves. Aprende sobre la comunidad de Padre Nuestro, reubicada hace algunos años con el fin de proteger los mantos subterráneos que proveen de agua a casi toda la parte este de la isla. Despúes de disfrutar de las exposiciones interpretativas ubicadas en la entrada del kiosko, toma el sendero hacia el árbol de orquideas, la carbonera, el bosque de cactus, y el árbol patas arriba. Termina tu visita nadando en el manantial subterráneo en la cueva de Chico II. El Sendero Padre Nuestro está localizado a poca distancia de Bayahíbe, en el Parque Nacional del Este. Contacta a tu hotel para organizar tu tour. 900 metros (0.6 millas) Longitud Dificultad De fácil a moderada Trae contigo Agua y linternas para el interior de la cueva

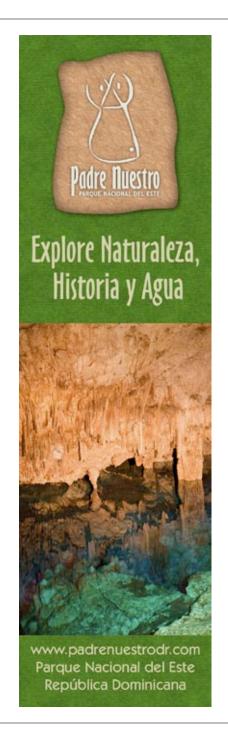




# Product 5 Bookmark "Padre Nuestro Trail" Explore Nature, History & Water

- 2 x 7 inches, printed one sided only
- English and Spanish versions





**English version** 

**Spanish version** 

## Product 6 Padre Nuestro Trail Multimedia

- Video DVD
   Multimedia Presentation
- English and Spanish versions included

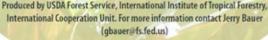




#### **Product 7 Padre Nuestro Trail Photos**

• High-resolution Photographs







#### Product 8A Padre Nuestro Trail Marker

- 4 x 8 inches (with directional arrow).
- Recommended to be carved by local artisans.



#### Product 8B Padre Nuestro Trail Marker

- $4 \times 5.25$  inches (without directional arrow).
- Recommended to be carved by local artisans.



Product 9 Logos



















