

As you travel on the tracks of the World's first Trans-Continental Railroad, running parallel to what is known as the 8th Wonder of the World; the Panama Canal, you will see an extraordinary beauty of flora and fauna. Panama has more species of birds, mammals, reptiles and plants than Canada and the United States combined. The name Panama is itself derived from an indigenous word meaning abundance of fish.

When arriving at Gatun Lake, the large vessels carrying the World's commerce can be seen transiting the Panama Canal. This incredible feat of engineering in itself changed the maritime world forever.

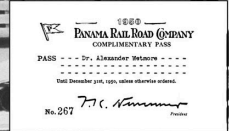
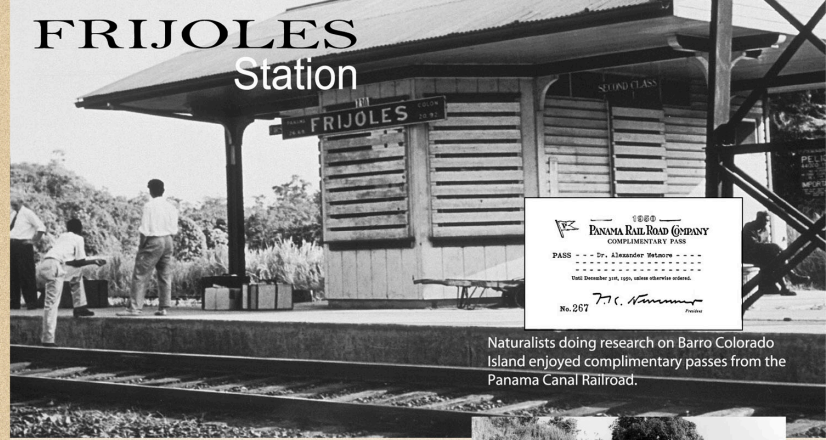
Originally completed in 1855, The Panama Railroad became the first transcontinental railroad. The French Panama Canal Company purchased the railroad in 1880 to assist in their attempt to build the Panama Canal. In 1904, the United States purchased the New Panama Canal Company's assets from the French, including the railroad. The US rebuilt and operated the railroad until 1979, when it was transferred to Panama under the terms of the Panama Canal Treaty. In 1998, Panama privatized the railroad and awarded a 50-year concession to the Panama Canal Company, a joint venture of Kansas City Southern and Mi-Jack Products, to rebuild and operate the line. The new "reborn" railroad began operations in 2000. The visual charms of this train ride will make this an unforgettable trip. We welcome you and invite you to enjoy your journey through the jungles of Panama and along the Panama Canal on the world's most celebrated and historic railroad.

Did you know that?

- That at \$295 a share, the Panama Railroad was at one time the highest-priced stock on the New York Stock Exchange?
- That the PRR was the most expensive (per mile) railroad ever built? It cost 8 million dollars and took 5 years to build.
- That more than 12000 people died in the construction of the Panama Railroad?
- That during the first 12 years of its operations, the Panama Railroad carried over \$750,000,000 in gold dust, nuggets, and gold and silver coin—and collected a quarter of one percent on each shipment.
- That even though built by American Engineers, the Panama Railroad used a non-standard gauge of five feet, and is unchanged till today?
- That the Panama Canal would have been impossible to build without the Panama Railroad?
- That the Panama Railroad was instrumental in bringing about the independence of the Republic of Panama?
- That the PRR gave birth to the city of Aspinwall (now called Colón)?

During the building of the Panama Canal, the Chagres River was dammed. The old Panama Railroad as well as several settlements were submerged. It's rising waters flooded the valleys, forming Lake Gatún, and hilltops became islands. The highest hill, Barro Colorado ("red clay"), in the middle of the Isthmus, between the rainy Caribbean and the drier Pacific lowlands, became the largest island in the new lake. In 1923, the island became a nature reserve, and a tiny research station was established there. As time went by, naturalists from around the world would come to study its rich flora and fauna and reveal in hundreds of articles and books the secrets of a tropical forest.

FRIJOLAS Station



Naturalists doing research on Barro Colorado Island enjoyed complimentary passes from the Panama Canal Railroad.



Dock at Frijoles in the Panama Canal Zone. Since 1923, staff of the Smithsonian Tropical Research Institute took a train from Panama City to Frijoles and then travel by boat from this dock to Barro Colorado Island to conduct research.

Frijoles Point is part of the Barro Colorado Natural Monument. Under the Torrijos-Carter Treaty and in compliance with the terms of the Convention for Nature Protection in the Western Hemisphere, Barro Colorado was declared a Nature Monument in 1979. In addition to the island, the neighboring mainland peninsulas of Buena Vista, Frijoles, Peña Blanca, Gigante and Bohío were incorporated to the Nature Monument, comprising a protected area of 12,000 acres altogether.

Did you know that?

- For many years an old Frenchman ran a distillery in which he made rum of such good quality that he boasted that it was sold in Colón to rectifiers who made it into "genuine French cognac."
- This section was rich in its variety of birds, beasts, reptiles, and insects. The tapir was occasionally found in the river and marshy grounds. Monkeys in variety, the peccary, the deer, and two or three varieties of the tiger-cat, were native here. Land-crabs abound in great numbers.

"The dock where visitors and their baggage are landed by the Laboratory launch which brings them from the little railroad station of Frijoles, three miles away across the Canal. Frijoles is almost the midpoint on the Panama Railroad and three trains a day in each direction make all other points in the Canal Zone very easy to reach from the Laboratory".

by Josselyn Van Tyne from The Wilson Bulletin, December 1930

The Smithsonian Tropical Research Institute (STRI) gratefully accepts contributions to support the work of the institution. Your donations are fully tax-deductible, in Panama as well as in the United States.

STRI, a unit of the Smithsonian Institution in Washington, D.C., is one of the world's leading centers for basic research on the evolution and ecology of tropical organisms.

STRI programs include the dissemination of research results and public education programs to increase understanding and awareness of tropical environments. The training of future generations of tropical biologists—through fellowships, internships, field courses, seminars and workshops—is also a priority at STRI.

With your contribution, the Smithsonian Tropical Research Institute will continue to conduct research aimed at understanding the tremendous biological biodiversity of the tropics, inspire scientists and educate the general public, consolidating our efforts to conserve the environment

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The history of STRI begins with the construction of the Panama Canal in the early 1900s. Smithsonian scientists were asked by the Government of Panama to conduct a biological inventory of the new Canal Zone in 1910, and this survey was subsequently extended to include all of Panama. The Governor of the former Canal Zone declared Barro Colorado Island (BCI) a biological reserve in 1923, making it one of the earliest biological reserves in the Americas. During the 1920s and 1930s BCI, in Lake Gatun, became an outdoor laboratory for scientists from US universities and the Smithsonian Institution. By 1940, more than 300 scientific publications described the biota of BCI, and in the "Government Reorganization Act of 1946", BCI became a bureau of the Smithsonian Institution. STRI, as we know it today, dates from the 1960s, when the first permanent staff scientists were hired and fellowship programs to support aspiring tropical biologists were initiated.

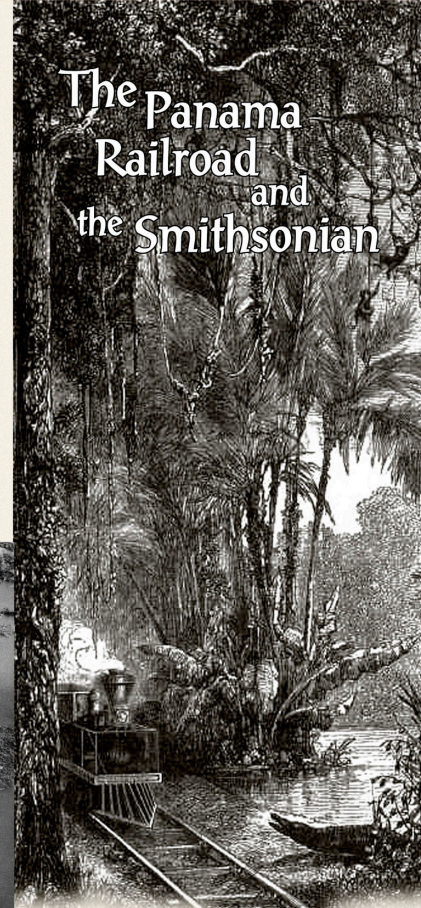
An early aerial view of Barro Colorado, the largest island in Gatún Lake, seen at bottom, in June 1927. The view taken by a U.S. Army airplane based at France Field, Colón.



A strong relationship with the Republic of Panama, STRI's host nation, was formalized in the Panama Canal Treaties of 1977 and again in 1997 when it was renewed beyond 2000, the country offered custodianship of STRI facilities beyond the

The Isthmus of Panama - the umbilical cord joining South and Central America

The Isthmus of Panama rose above the water, about 3 million years ago, allowing migration of species in both directions. Panama's arched shape reflects both its role as a bridge between continents and as a passageway between oceans. As a result, you will encounter in Panama a diversity of flora and fauna found in no other place in the world, and this is primarily due to the position of the Isthmus as the crossroads of the Americas.



Smithsonian Tropical Research Institute

STRI's location in the Republic of Panama provides an ideal setting for research in both land and marine environments. The rise of the isthmus from the sea about 3 million years ago linked the previously distinct floras and faunas of North and South America, but divided the marine life of the Atlantic and Pacific. This unique history offers opportunities for evolutionary and ecological studies unequaled anywhere else in the world.



1. Galeta Point Marine Laboratory

Located on the Caribbean Coast of Panama, in the Province of Colon, offers guided visits to students, tourists and the general public. Through these visits we emphasize the importance of conserving our unique ecosystems and the marvelous opportunity these ecosystems provide to scientists wishing to understand the environment we share. Here you can admire the beauty of important mangrove ecosystems and fall in love with this unique site at the edge of the sea.

Tel.: (507) 212 8191
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Fort Sherman

Colon (Aspinwall)

Galeta Point Marine Laboratory

1

Monkey Hill (Mount Hope)

Fort Davis

Tiger Hill

Lion Hill

Ahorca Lagarto

Bohio Soldado

Frijoles

Barro Colorado Nature Monument

Barbacoas

Tabernilla

Gigante

Lagarterita

2. Barro Colorado Nature Monument
Barro Colorado, the largest forested island in the Panama Canal waterway, is part of the Barro Colorado Nature Monument (BCNM) and is the site of an internationally recognized biological research station.

The wildlife there is extremely diverse. There are probably thousands of insect species and more than 120 species of mammals, nearly half of which are bats.

Tel.: (507) 212-8951
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---★--- Old Panama railroad route

---○--- Present Panama railroad route



Lake Madden

Chagres

Gatun

Boyd-Roosevelt Highway

Soberania National Park

Chilibre

Gamboa

Emperador

Summit

Gaillard Cut

Paraiso

Paraiso

Pedro Miguel

Miraflores

Miraflores Locks

Ancon

Balboa

Panama City

La Boca

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Inter-American Highway

Miraflores Locks

Pedro Miguel Locks

Paraiso

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Pedro Miguel

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Balboa

Panama City

La Boca

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Inter-American Highway

Miraflores Locks

Pedro Miguel Locks

Paraiso

Paraiso

Pedro Miguel

Miraflores

Ancon

Balboa

Panama City

La Boca

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Inter-American Highway

Miraflores Locks

Pedro Miguel Locks

Paraiso

Paraiso

Pedro Miguel

Miraflores

Ancon

Balboa

Panama City

La Boca

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Inter-American Highway

Miraflores Locks

Pedro Miguel Locks

Paraiso

Paraiso

Pedro Miguel

Miraflores

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Balboa

Panama City

La Boca

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Miraflores Locks

Pedro Miguel Locks

Paraiso

Paraiso

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Balboa

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