

# FULL MOON

Visitor's Program Newsletter

Barro Colorado Nature Monument, Panama

Comes out every full moon...

## Full moon on the Lake

To arrive on Barro Colorado Island one must cross Lake Gatun—the largest artificial lake in the world when it was built. Although the majority of our visitors associate a trip to Barro Colorado with a walk in the forest, don't forget that a large part of each day visit is spent on the Lake. On weekend visits, more than a quarter of the visit is spent cutting across its waters. And biologists from Barro Colorado use the lake to travel to their study sites on the five mainland peninsulas of the Barro Colorado Nature Monument, and to distant points on the other side of the island. Therefore, it's worthwhile to consider the origin and characteristics of this body of freshwater that bounds and connects us.

Lake Gatun's water comes from the Chagres River, and also from other sizeable rivers (the Mandinga, Gatun, Trinidad, Ciri Grande...). What was once the Chagres River Valley, between the towns of Gamboa and Gatun, became Lake Gatun between 1910 and 1913. Water backing up behind Gatun Dam to form the lake inundated small towns and vast tracts of forest. Today, dead tree trunks poking out of the lake (for example, look for an enormous trunk to your right as you arrive on the island), and the names given to railroad stations, peninsulas and even to Barro Colorado Island, itself, are a reminder of areas that were flooded. "Gatun" was a town near the dam (and is now under water). The old rail line (1855) was also partly submerged. In 1908 and before the flooding of the Chagres Valley, its relocation began. It took more than four

years to construct 40 miles of new track, at a cost of nine million dollars.

Gatun Dam was the largest dam in the world when it was constructed. To erect and consolidate it was a three year task. Material extracted from Culebra Cut

was used. From the cut alone, five and a half million cubic yards of soil and rock were moved from Culebra to Gatun by rail. In comparison, only a million and a half cubic yards (also from Culebra Cut) were used to make the entire Amador Causeway. The first to demonstrate the ease and convenience of a dam on Lake Gatun, 30 years before its construction, was French engineer, Godin de Lapinay. His proposal was not accepted by the French.

On June 27, 1913, Gatun's last sluice gate was closed. On the 10<sup>th</sup> of October, the earthen dike at Gamboa separating the new lake from the Culebra Cut was dynamited. Thus, the waterway between the two oceans was practically ready.

The area of the lake is 425 km<sup>2</sup> and it is 26 m above sea level when full. It is not generally a very deep lake: the maximum depth of the Canal channel is 29 m. The lake has a fairly particular fauna and flora, in part a product of introductions, some



*Moonlight on Lake Gatun. The forests of Barro Colorado in the background. Dry season, 1998. Photo: C. Ziegler.*

planned (such is the case of the reintroduction of the manati to control aquatic weeds, and of certain fish), and others as a result of random events or negligence (at least a dozen other fish species, among them, the famous striped bass or "sargento" some aquatic plants, snails, etc.).

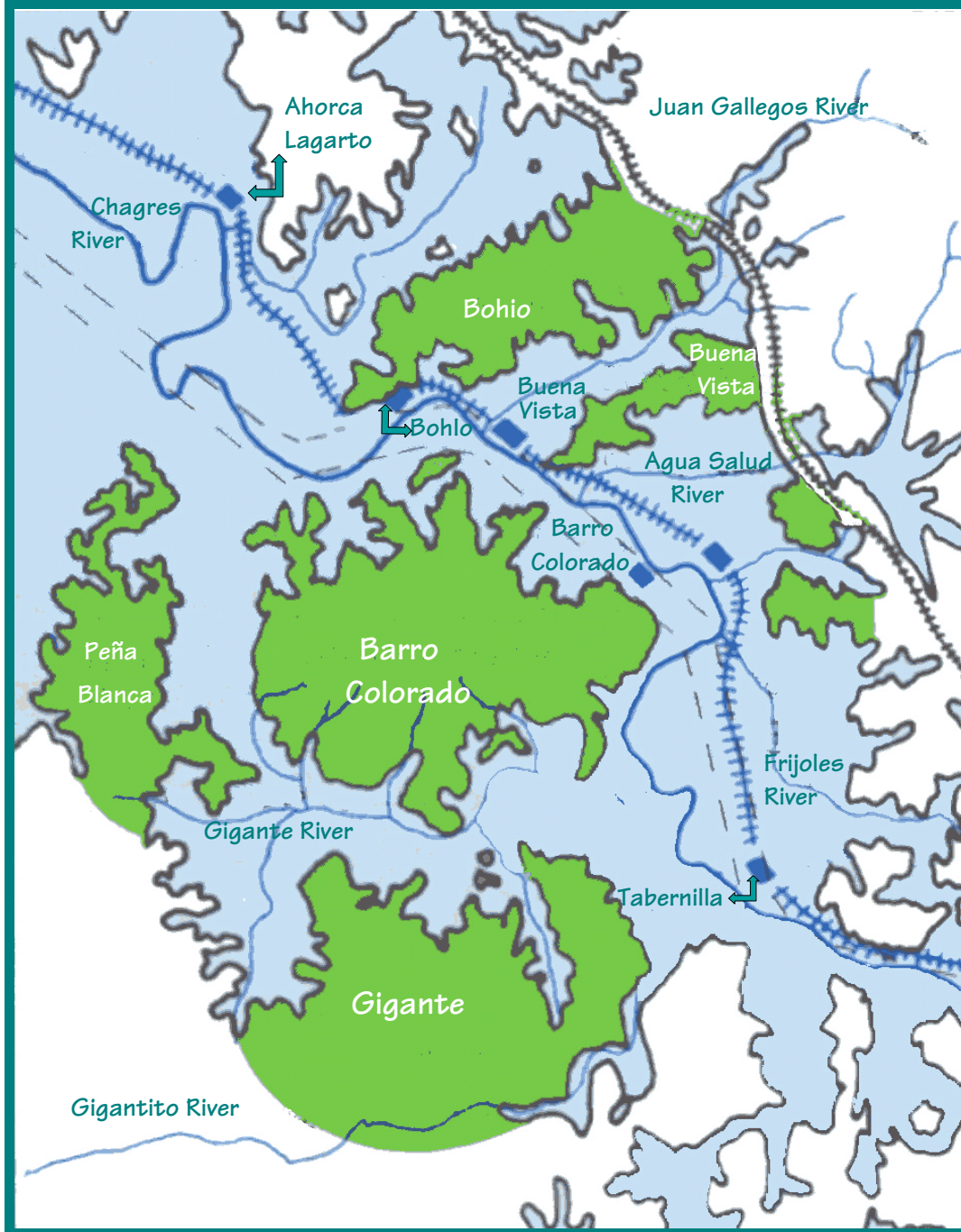
Those of us who work with the Barro Colorado Visitors Program bear in mind that, for the majority of our guests, the trip across the lake is their first chance to transit the Canal waters, the most important waterway in the historical development of our Nation. Therefore, welcome to Barro Colorado Nature Monument. But, first, welcome to Lake Gatun and the Panama Canal. **JV**

### Editorial board:

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Barro Colorado Nature Monument (green area) in relation to the Chagres Rivers and its tributaries (blue lines). The old Panama Railroad as well as several settlements were submerged when the Chagres River was dammed to form Lake Gatun (blue area). Some of the land masses on BCNM bear the names of these former settlements: Bohio, Barro Colorado, Buena Vista, Frijoles. The remaining areas are named after a nearby river or the appearance of the landmass: Gigante, Peña Blanca. In the vicinity of BCNM, the present railroad (black tracks) parallels on higher ground the route of the pre-canal railroad (blue tracks). The channel of the Panama Canal in Lake Gatun is indicated by black dashed lines. (Adapted from: Woodring, W.P. 1958. *Geology of Barro Colorado Island, Canal Zone*. Smithsonian Miscellaneous Collections Volume 135, No. 3)



## This moon's visitors

- Dic 16 La Salle School  
San Antonio
- Dic 17 STRI visitors  
Mixed groups
- Dic 19 Peace Corps
- Dic 22 La Salle School
- Dic 23 STRI visitors
- Dic 26 Mixed groups
- Dic 27 Mixed groups
- Dic 29 STRI visitors
- Dic 30 Mixed groups
- Ene 2 Visitors L. Latorraca
- Ene 3 Gamboa Tours
- Ene 5 Alejandro Arze
- Ene 6 Ecological group  
from Penonome
- Ene 7 Educational program  
(R.Robledo)
- Ene 9 Full Moon!**
- Ene 10 Panama Tours
- Ene 12 Summer course
- Ene 13 Youth Ministry



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