



Biomuseo, Panama City (from museum's website)

Two Places, One Planet

Travels are a reminder of endangered plants and animals right here.

I've just returned from Panama where I picked up a lot of interesting facts at the Biomuseo, or Biodiversity Museum (pictured), designed by the world-renowned architect Frank Gehry. It is situated on a strip of land called "the causeway," constructed from the soils dug from the Panama Canal to act as a breakwater to maintain the canal from the erosive forces of the Pacific Ocean.

I was aware of some of these facts, but one of the great things about travel is that it changes your perspective; you are no longer at the center of your universe but

rather at the center of someone else's. The geological creation of the Isthmus of Panama had effects around the globe. It transformed world weather patterns, changed the currents of the Pacific and Atlantic oceans, and may have triggered the Ice Ages. Panama's emergence may even be responsible for climate changes in Africa that prompted the evolution of man.

The story of the creation of the Isthmus of Panama lends itself to unique worldwide perspectives. About 3 million years ago, this land bridge blended the creatures of North and South America with interesting outcomes. Think of taking gene pools from different species and shaking them up; over eons the results have been some fascinating and unusual animals, such as coatis, anteaters, sloths, and toucans. Today the Isthmus remains a bridge of migration; birds especially often prefer land crossings to the perils of the ocean. Important migratory refueling stops and the safety of being able to rest, funnels countless species over Central America.

Tragically, we are rapidly losing our planet's biodiversity. Development such as expanding cities and farms worldwide has encroached on native habitats. Many species have perished before even being

identified. The World Resources Institute cites a study that took place in 1980. In only 19 trees in Panama, 1,200 beetles previously unknown to science were discovered. Amazingly, just one hectare (2.4 acres) of forest in Panama has more tree species than all of North America!

Scientists have identified about two million species and many more remain to be discovered.

When we include bacteria, it is estimated that only one-tenth of the world's species has been identified. However, most sources tell us the world is experiencing the greatest rate of extinction since the catastrophic die-out of the dinosaurs. The World Wildlife Fund tried to quantify the current rate of extinction: One hundred million different species on earth, at a loss of just .01 percent a year, is a loss of 10 thousand species annually. Unlike the fate of the dinosaurs, today extinction is driven by development.

If you consider that more than 50 percent of our medicines are based on natural products, you will realize how important biodiversity can be, not only for microhabitats but also for us. These resources and most of the fruits and vegetables we eat would not exist if it

were not for their pollination by bees and other natural mechanisms. And yet these cycles also are imperiled when two people per second are added to our planet!

Each time I go away I take time to reflect on our interrelatedness to the rest of the world. Neotropical birds are a perfect example of our shared responsibility for a species. These splendid world travelers nest here or travel through our area on their way to breeding grounds. Each region along the way plays a critical role in their success. If any of the regions fail to provide necessary habitat in that crucial oasis, extinction is a likely outcome. Animals can adjust to a limited degree, some better than others, but lose enough necessary connections and the species is gone forever.

A pet peeve of mine is when people talk about saving rainforests, pandas, elephants, and a host of other species and support these campaigns to the exclusion of local conservation efforts. It amazes me that school texts focus on the extinction of species in far-off continents when we have many endangered plants and animals right here. I would guess that most people would be hard-pressed to name five locally endangered species. Yet we have dozens. Not only can we have the most

impact right here in our backyards, but it is our responsibility to be good local stewards. And although we may not have the incredible biodiversity of the tropical forests, we have a moral obligation to maintain our own species—the species for which we can have the greatest positive impact.

I didn't need to go to Central America And to recognize that, but it was a great reminder of how special our own area is!