Amazon Adventure

by Tonya Summers and Adam Dichsen with Joe Summers

Share a dream-of-a-lifetime vacation...

e milled around, blending in with all the other travelers in the Miami airport, pretending to be urbanely bored with this travel thing. We were a diverse, although quite ordinary group, people you might encounter in the supermarket down the street...or in an airport, including...Karen

Adney, a Tennessee Aquarium volunteer from Chattanooga; Charles Frase, a plant enthusiast from Morristown, New Jersey; Adam Dichsen, a college student from O'Fallon, Illinois; George Thornburgh, enjoying his retirement in St. Louis by volunteering nearly fulltime at the MBG; Caroline Christensen, a school teacher from Collegedale, Tennessee, with her son Eric; Janet and Steve Wixson of Signal

Mountain, Tennessee, a retired couple just back from their own bicycling 'Tour de France'; Karen and Pat Brown, a mother-daughter pair from Gainsville, Florida, who just wanted to visit the Amazon; Phyllis Pusczek, a recently retired St. Louisian now about to become a 'world traveler'; Camilla Kotrba, a dietician from St. Louis, making her third trip to Brazil; and Tonya Summers, a pre-school Montessori teacher who had missed the trip the year before as she awaited the birth of *Pond & Garden's* cover girl. We numbered nineteen, each barely suppressing our excitement. We were headed for Brazil to spend nine days aboard a double-decker boat cruising down the Amazon River in the world's largest contiguous rain forests!

Presented jointly by the Tennessee Aquarium in Chattanooga, Tennessee, and



Tonya Summers had to wait an extra year before making her first Amazon trip. Twelve-month-old Lily stayed home with Grandma and Grandpa!

Missouri Botanical Garden in St. Louis, Missouri, this trip was an anticipated return for the Aquarium's Charlene Nash and MBG's Joe Summers. This trip would actually be Charlene's third trip to Brazil. With extensive aquatic plant experience, having conducted agricultural



Captain Mo and his Harpy Eagle spend about 200 nights a year on the Amazon with travel groups.

antibiotic research and owning her own nursery business before joining the Aquarium, Charlene's present duties at the Aquarium include collection and caring for aquatic plants, as well as tending other species in the Aquarium's living exhibits. Joe, of course, is a horticul-

turist with the internationally renowned Botanical Garden, tending to the propagation of seasonal aquatic plants, most notably the tropical water lily collection created by George Pring and the spectacular 'platter lily,' the *Victoria*, a native plant of South America. Both Charlene and Joe would be in quest of information about the *Victoria amazonica* that is found in the Amazon region we would explore.

The Harpy Eagle, owned by Captain Moacir

Fortes Pereira, was our home for the next week and a half. We ate and slept aboard this vessel. Designed for up to 21 passengers and a crew of 6, Captain Mo's boat offered air conditioned bedrooms and private bathrooms, so we weren't really 'roughing it.' Three accompanying motor boats allowed explorations of the many small tributaries emptying into the magnificent River. Mo reported that he spends 200 nights a year on the river with clients like us.

We began our adventure on June 6, 2000, in the Manaus region. Because it was the start of the 'dry'



Two or three times a day, the group boarded the three motor boats for mini-expeditions.

season, it rained on only two days of the entire trip. However, water marks could be seen on the trees edging the River, noting a six-foot drop already at the beginning of the season. During a typical year, from wet season highs to dry season lows, the river can rise or drop 30 to 40 feet.

While the Amazon River is about 4,000 miles long and is the second longest river in the world with twenty percent of the Earth's fresh water flowing through it, our adventure covered only



Flying into Manaus, the legendary Victorias are visible 300 feet below.



The popular mosaic plant, *Ludwigia sedioides*, was found growing in its native Amazon habitat.

550 river miles. Our journey was centered around the city of Manaus, a large bustling port with its surrounding shores packed with houses and boats. Manaus is also the site in which one of the over-a-thousand tributaries flows into the Amazon River. With tea-colored water, the Rio Negro is known as the 'black river.' At Manaus where the Rio Negro joins the Amazon River is the 'Wedding of the Waters,' the two rivers flowing together, side by side, in separate streams of 'black' water and 'white' water for many miles.

Interestingly, the Rio Negro has an average pH of 4.6-5.2, with the water being so acidic that the diversity of plant life is significantly less than that found in the white water Amazon. The

famous Victoria water lily, for example, is found only in the white water areas. However, the Rio Negro is ranked first in the world in diversity of fish species. Swimming with all those fish is enhanced by the lack of mosquitoes – the low pH water not allowing mosquito larvae to survive!

Our typical day on the Harpy Eagle began with a knock on each cabin door. "Good morning, five-thirty," Captain Mo's voice called to us. After a cup of coffee, Mo would call out, "Load the boats!" Splitting into three groups, we were off exploring, often in different directions. Upon returning, we devoured a morning meal of porridge, eggs, cheese, fresh fruit and juice.

We made three to four motor boat explorations each day. On one trip, we spotted red howler monkeys high in the trees along



For several miles the low-pH Rio Negro flows side by side with the 'white' waters of the Amazon River, creating what is known as 'the wedding of waters.'

the river's bank. All three boats converged as we tracked the group of five monkeys. They swung and climbed from tree to tree, trying to stay as far from us as they could. Our viewing, however, was extended as the trees grew in a flooded area, the high water preventing the howlers from



Adam introduced himself to a young caiman and then returned the baby to the River.

shooting off into the deep forest.

Kevin Newsome of Utah and Scott Hudson from Ohio were most interested in catch-and-release fishing. They used dip nets to compare the River's fish with those sold in the aquarium trade back in the U.S. The rest of us were more interested in the famous piranhas. The danger of the many dozens of species of piranha has been greatly exaggerated. Even though a person occasionally may be bitten by one, there are many more piranhas eaten by humans than

Piranha are notorious for their sharp teeth and carnivorous feeding, although they are 'the eaten' more often than not.

there are humans eaten by piranhas.

Mo's crew prepared lunch and dinner for us upon our returns. These meals were usually rice, beans, fish, and an assortment of vegetables. With each meal, we learned yet

another way to serve manioc. A root crop similar to potatoes, manioc is popular with the natives, but we tourists never acquired a taste for the plain-tasting staple.

On most afternoons we traveled the river without stopping. This allowed us to escape the heat of the day and take a short nap, if need be. It also gave Donny and Vicki Ferguson of Longwood, Florida, a chance to lead our group in plant discussions and identification. Donny is a commercial plant grower, and Vicki is an ento-



Often the Amazon River is so wide that but a fringe of trees can be seen on the far bank.

mologist turned illustrator. Vicki identified and sketched the items we had collected — either cuttings or fruits that had fallen into the river. Our treasures were then returned to the river.

One afternoon, Mo docked at Novo
Airao to check on the progress of his
newest boat, the Victoria Amazonica,
being built by hand. Our resident suring 8
cyclists, Janet and Steve Wixson, took advantage of the landing and led us on an impromptu
bike trek through the town.

Throughout our excursions, we discovered wildlife such as the reptilian caiman, the yellow rumped cacique birds that build long, swallow-like nests in colonies along the river, humming-bird-sized tarantulas, brilliantly colored parrots, and leaf cutter ants, most of these seen only before on the Discovery Channel.

One of the most exciting moments of the trip was finding a Victoria leaf measuring 81 inches.

Lush tropical plants provided unending wonder – bromeliads with tall spiked blooms, a *Galeandra* species orchid even growing 'in the river,' and passion flowers. We also were introduced to the rubber tree. Familiar to most of us as but a tropical houseplant, the profitable rubber tree is how Manaus became an economic leader at the turn of the last century.

The Victoria water lily, however, was the highlight of the trip. Adam, Tonya, and Joe took

measurements of water depth, along with temperature readings of the river at the surface and at the river bottom. Amazingly, the lilies were growing in depths ranging around the 20-foot mark. Most literature reports that Victorias grow naturally in water depths of 3-4 feet, but this recent depth information confirms what Joe Summers and Charlene Nash had observed the year before. Although on the previous Amazon trip they had taken only depth and temperature measurements, on this trip they also measured the Victoria leaves themselves. We actually found and measured one leaf at 81 inches in diameter. Eighty-one inches!

This was nearly 20 inches larger than any person in our group had ever personally seen. Before leaving the white-water Amazon home of the great Victorias, about half of our



The first-night flower of *Victoria amazonica* is a fragrant and pristine white.

group arose at four in the morning for one last look at the magnificent leaves and still-open



(above) Along the Amazon, homes are built on stilts so that they can float when the River rises.

(inset) Opening the second night, the flower of *Victoria amazonica* is rosy pink to red.

night-blooming flowers. We would leave behind the Victorias as we headed into the Rio Negro where the river's pH does not allow the Victoria to survive.

74

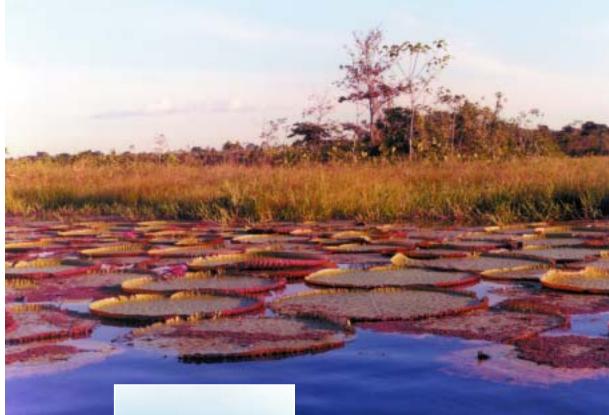
What was the best part of the trip? That's the question everyone asks upon our return. Maybe the best part was seeing that 81-inch Victoria...or watching the elusive, endangered

> pink dolphin swim near the Harpy Eagle...or being immersed in the fabled rainforest, flashlight in hand, at night...or simply being on such a large volume of water.



The nests of a colony of yellow-rumped cacique look like woven stockings hung among the tree's

There were times when you barely could see the bank on the other side of the river. From small things like riding on the river while the rain fell, to



the incredible shooting star that blazed across the sky in a slow, bright arch before fragmenting over the rainforest, to the big like things meeting the people Brazil



The explorers passed a *Galeandra* species orchid growing in the River.

learning about their daily lives on the River, the best part has to be the entire trip.

It is not possible to share the full experience of the Amazon in this article. If you are interested in attending a future trip to the Amazon, contact Joe Summers at Missouri Botanical Garden, 314-577-9404.

Confirming their findings of the previous year, Joe Summers and Charlene Nash measured the depth in which some Victoria amazonica were growing – twenty feet!



An important part of native life along the Amazon are the floating stores that anchor at various points in the River, awaiting the boat arrival of shoppers.