New England Botanical Club - Minutes of the 1001st Meeting
5 November 2004
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The 774th meeting of the New England Botanical Club, being the 1001st since its original organization, was held on Friday, November 5, 2004, in the Lecture Room of the Fairchild Biochemistry Building, Divinity Avenue, Cambridge MA. There were 35 members and guests in attendance.

President Art Gilman opened the meeting by thanking volunteers and attendees for making the 1000th meeting celebration a success. Vice President Karen Searcy then introduced the night's speaker, Dr. Garrett Crow. Garrett is a former president of the NEBC and also a current Associate Editor of *Rhodora*. His talk, titled "In the footsteps of the 19th century naturalists: Plant exploration in the Amazon," focused on his past trip to the Amazon, an expedition by boat that simulated the experience of our botanical forefathers. The trip included exploration around Manaus, a river city located in the Amazon Basin, where the Amazon River and Rio Negro come together.

In the mid-1500s, Francisco de Orellana became the first European explorer to travel down the Amazon River, where among the discoveries he made were tribes of native Amazon warrior women. Since then, many others have explored this rich region, including the botanist Richard Spruce, who was hired by William Hooker, the director of the Kew Royal Botanic Gardens. During the mid-1800s, Spruce collected botanical specimens throughout the Amazon.

In their trip down the path of past explorers, Garrett and other participants had frequent opportunities to explore the river on canoes, allowing them to get up close and personal with many unique plants. There was an amazing diversity of epiphytes, including bromeliads, ferns, aroids, and, of course, orchids. Trees that were spotted along the riverbanks included the night-opening *Pseudobombax munguba*, a bat-pollinated species with flowers resembling powder puffs.

Aquatic plants encountered included the spectacular *Victoria amazonica*, a massive water lily whose flowers also open at night, but attract beetles. The Victorian water lily has beautiful white flowers that turn to pink as they senesce, then sink below the surface of the water as the fruits form. Floating mats of plants also form in the river; species found there include *Oxycarium cubense*, grasses in the *Echinochloa* genus, and water hyacinth (*Eichhornia crassipes* and *E. azurea*). These mats can become so thick that birds often nest in them, a visual treat for the birdwatchers in the group.

There are also a number of plants in the Amazon Basin known for their economic uses, including Brazil nuts (*Bertholletia excelsa*), heart palm (*Euterpe oleracea*), and curare (*Strychnos* sp.), a plant that produces a poison used by hunters on the tips of arrows and darts. Some inhabitants along the river farm jute (*Corchorus* spp.), which is soaked in water to allow bacteria to digest the vegetation, leaving only the fibers to be harvested.

The Amazon Basin is noted for the high biodiversity of its flora, with countries like Bolivia estimated to have 11,000-18,000 native plant species. Garrett noted that if you look at biodiversity by locality, however, the numbers in Amazonia are actually comparable to those in temperate zones. Costa Rica and Bolivia actually have lower aquatic and wetland plant biodiversity compared to New Hampshire, and Garrett hypothesized that this may be because the Amazon has too much deep water and not enough shallow borders where plants can grow. Garrett ended the talk by encouraging club members to attend a return trip to the Amazon, organized by the New York Botanical Garden. The trip is scheduled for July 2005.