

Fairchild Challenges South Florida Students



Director of Education Caroline Lewis shows students how bamboo can be used to create structures.

The Fairchild Challenge—the Garden’s annual, competitive, environmental education program for South Florida teenagers—is in full swing. Caroline Lewis, Fairchild’s Director of Education and architect of The Challenge, opened this year’s competition on October 10, at a workshop for 120 science and math department chairs held in the Visitor Center Ballroom. Lewis inspired the capacity crowd with stories of last year’s pilot program. “Reading the students’ testimonials,” she confided, “I laughed and cried . . . sometimes at the same time.”

The Challenge aims to heighten students’ environmental awareness, scholarship and stewardship—and to empower them. “After doing The Challenge, I felt important and needed,” said Lauren Gongora, a student at Barbara Goleman High. Her school tied for first place with Miami Palmetto last year and both schools received a \$1,000 cash prize for their respective environmental programs. “Thanks so much for awakening the environmental spirit in all of us.” wrote Miami Palmetto science department chair Patty Valois, expressing a sentiment Lewis hears often.

After observing the success of the

new program for high schools last year, middle school teachers asked the Garden to create a parallel program for their students. “We’ve responded,” Lewis announced to the teachers’ workshop, “with twelve Challenge Options designed for middle schools. Start your engines!” With the January 28 registration deadline approaching, more than a hundred middle and high schools have already signed up. Lewis predicts that about 4,000 students will participate this year, a 280% increase.

“Cool” is a frequent response from students who hear of the program for the first time. Anna Scharnagl, a student at Coral Reef High, leader of its ecology club, and self-described “eager participant,” was among the first to inquire about The Challenge, even before the official kick-off in October. “Now,” says Education Outreach Coordinator David Whitman, who oversees the program, “we’re getting a cascade of requests to visit schools.”

In the tradition of explorers Lewis and Clark, Lewis and Whitman are forging ahead into new territory, and botanical institutions all across the country are watching. “It’s exhausting and exhilarating at the same time,”

The Fairchild Challenge is designed to foster an interest in the environment by encouraging students to appreciate the beauty and value of nature, develop critical thinking skills with respect to environmental issues, understand the need for conservation and biodiversity, tap the resources of Fairchild Tropical Garden and other institutions for environmental and interdisciplinary studies, become actively-engaged citizens in their communities and recognize that individuals do indeed make a difference.

concluded Lewis after visiting six successive classes on a single day at Killian High. After outlining the poetry/rap Challenge Option to one class, Lewis was pleased to see students suddenly improvising rhythmic verse about the Florida Everglades. “We’re coming to the awards ceremony in May to get our prize for first place, Ms. Lewis!” they shouted.

The logistics of working with more than a hundred schools can be daunting, as Lewis discovered when delivering Challenge books to Our Lady of Lourdes Academy just moments before a celebrity’s appearance there. Lewis and Whitman are actively recruiting ambassadors from the Garden’s board of trustees, staff, volunteers, Challenge steering committee, Fairchild Palms and community groups interested in promoting the program. “We’re asking the Challenge ambassadors to adopt schools,” says Whitman. University of Miami biologist Blase Maffia has adopted the Gulliver schools, where he previously taught; *Progreso Weekly* editor Alvaro Fernandez is concentrating on Homestead schools, where he sees an urgent need for youth programs.

Last year’s pilot Challenge program was “frighteningly successful,”

according to Don Evans, Fairchild's Director of Grounds Management and an enthusiastic member of the steering committee. Evans recently collected seeds for native-plant germination experiments now taking place in classrooms from Homestead to Hialeah. Palm Springs Middle School science teacher Janis Lord, overseer for the past 20 years of that school's native-plant and palm gardens, was grateful for the seeds Evans collected: royal palm, Florida thatch palm, southern live oak, wild coffee and lignum vitae. She is urging Palm Springs students to get involved, appealing to their enthusiasm for competition, environmental sensitivity, neighborhood pride and natural curiosity.

One of the most intensive Challenge Options for high schools is the Environmental Immersion Day, planned for Thursday, March 18. Students will work at sites from coral reefs to research laboratories. Partners for this activity include Florida International University, the University of Miami's Rosenstiel School of Marine and Atmospheric Science, Miami-Dade College, Castellow Hammock Park, Deering Estate at Cutler, Biscayne Bay Aquatic Preserve, Florida Sea Grant Office, Marine Council, Officer Snook Water Pollution Program, Marjory Stoneman Douglas Biscayne Nature Center, Citizens for a Better South Florida, Tropical Audubon Society and Everglades National Park. Interested students are required to write a two-paragraph letter explaining why they want to participate in

D Whitman



Dr. Diane Goodman presents a workshop on the Fairchild Challenge to 120 science and math chairs from Miami-Dade County schools.

Challenge Workshop with Diane Goodman

For the start of this year's Fairchild Challenge, education consultant Dr. Diane Goodman presented a workshop on interdisciplinary teaching and learning to science and math department chairs at a meeting at the Garden this past October. Here are excerpts from that session.

Shakespeare in the Tropics

Probably every work by Shakespeare includes poetry that explores nature and matches its beauty or sadness or violence to elements of human behavior. Perhaps the best place to start to look for these metaphorical connections is in the sonnets. Many of Shakespeare's sonnets deal with the birth-death-rebirth cycle found in nature and compare those elements to corresponding ones in human life.

Poetry/Rap Competition (Florida Everglades Theme)

Pattern, order, rhythm and sequence are essential components of the study of math and of the writing of poetry and rap. By inventing their own rhythmic sequence and then fitting language into the pattern, students will automatically discover the relationship between poetry and math. Using the Everglades as a theme, they can write fast, hip, lyrical poems for the competition that celebrate the rich variety and beauty of the Everglades and that also address environmental and conservation issues that threaten that precious Florida natural resource. Often, art inspires action and student-poets will be able to contribute to the preservation and on-going appreciation of the Everglades.

Theme Garden and Interpretation

Why do people garden? What are the various rewards that come from planting, tending, viewing and/or harvesting things that grow? Have students think about these questions before starting their theme gardens at school. The ideas formed in those discussions will yield themes for their gardens: aesthetic, edible, healing, memorial, color-coordinated, butterfly, organic, native plant, and so on.

All Challenge Options

Students should be as precise as they can be in their science and math studies. In this way, they will approach The Challenge with a solid foundation and can explore how the artistic disciplines are related through their Challenge activities. At the same time, they should call on the skills they learn in other classes—language, life skills, health, social science—to consider the relationships between what they are about to undertake and what they already know.

Environmental Immersion Day; each school will then select five candidates. "We ask schools to encourage motivated students who would most benefit from the hands-on experience of Environmental Immersion Day, not just those with the best grades," Lewis explains. "For students interested in exploring careers related to the environment, this is a great opportunity."

Middle school students with a flair for creative writing are selecting a tropical fruit, then describing it—using all senses—to someone completely unfamiliar with that fruit. Their peers in the visual arts are creating colorful, single-panel cartoons on environmental themes. Award-winning cartoons and essays will be published in future issues of *Garden Views*. Eva Doll, who coordinates Fairchild's Green Treasures program for middle schools, likes the cartoon category. "Creating environmental cartoons is a way to engage students who might not respond to more traditional approaches in the classroom. While visiting a middle school recently, I noticed one boy's hand-drawn Spiderman folder insert. It was fantastic! Two other boys then told me they could draw better Spiderman characters. One produced a napkin from his



Student Zachary Hooten learns about The Fairchild Challenge from its architect, Caroline Lewis.

bag, unfolding it to reveal a spectacularly detailed Spiderman, poised and ready to pounce. Their teacher told me he sometimes allows his students to express their thoughts in pictures instead of writing.”

Whitman is enlisting expert panelists to evaluate thousands of performances and student entries which will have already passed through rigorous screenings by teachers and student peers. In addition to the scientists and educators at Fairchild, more than 50 judges are already on board, including Los Angeles-based writer Gabriel Spera, recipient of last year's National Poetry Series prize for his book *The Standing Wave*; Peg Richardson, botanical artist and former director of the State of Florida Division of Cultural Affairs; and Helen Kohen, Miami art archivist and former art critic for *The Miami Herald*. Garden volunteer Roselle Foster, a retired math teacher, is brushing up on the Fibonacci sequence in nature, one of the research project topics she'll be judging in March. "I'm looking for that sequence everywhere now," she explains, "...in sunflowers, pine cones, pineapples."

Support for The Fairchild Challenge comes in part from the members and friends of Fairchild Tropical Garden, Miami-Dade County Department of Environmental Resources Management, South Florida Water Management District, BankAtlantic Foundation, Miami-Dade College, State of Florida Division of Cultural Affairs, Miami-Dade County Cultural Affairs Council, Miami-Dade

County Mayor and Board of County Commissioners, Florida International University's Undergraduate Mentoring in Environmental Biology and many volunteers.

"What you have created is simply amazing! Fairchild Tropical Garden should be extremely proud of the incredible success of The Challenge," says Cyd Hyeliger-Browne, Director of Education at Miami-Dade College. For more information on how you can get involved in The Fairchild Challenge, please e-mail challenge@fairchildgarden.org or visit the Garden's website, www.fairchildgarden.org.

Challenge Options

- Shakespeare in the Tropics
(December 10) ✦
- Poetry/Rap Competition
(March 13) ✦
- Environmental Immersion Day
(March 18) ✦
- Debate Competition
(April 10) ✦
- Botanical Art with Poetry ✦ ☿
- Environmental Cartoon ☿
- Creative Essay Writing ☿
- Persuasive Speech Writing ☿
- Theme Garden
and Interpretation at School ✦ ☿
- Booklet of Traditional Plant Uses ✦ ☿
- Research Report ✦
- Research Project ✦ ☿
- Reduce/Reuse/Recycle ✦ ☿
- Challenge T-shirt Logo Design ✦ ☿
- Challenge Brochure Design ✦
- Challenge Poster Design ☿
- Testimonials ✦ ☿
- Community Outreach Summary ✦ ☿
(✦ high schools, ☿ middle schools)

