Springtime at Fairchild; a treasure trove of Jade
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Fern Temple Jar, $240
Photo by Gaby Oribuela/FTBG.
Members of Fairchild Tropical Botanic Garden make a big difference, because they are part of a global community focused on tropical plant conservation and education. Fairchild members support programs in faraway places like Madagascar and Kenya. Fairchild members support conservation and education programs right here in South Florida. In fact, Fairchild’s scientists are leading plant conservation efforts in our local areas and neighborhoods.

Fairchild members receive free admission every day during regular hours; free admission to more than 500 other U.S. gardens, arboreta and museums; a free subscription to the award-winning The Tropical Garden magazine; 10% discount at The Shop at Fairchild; priority registration and discounts for educational courses and free use of the research and member libraries. Members also receive special invitations to members-only events such as moonlight tours, Members’ Day and fall plant sales, lectures and trips.

Join or renew your membership today. Your Fairchild membership has growth potential.

For more information, please call the Membership Department at 305.667.1651, ext. 3362 or visit www.fairchildgarden.org.
Springtime at Fairchild provides a great opportunity to see extraordinary flowering plants that come from some of the world’s most fragile habitats. Many of our showiest plants spring to life as the days become longer and warmer. Our spring flowers are not the tulips, daffodils and azaleas we see in cooler climates. Rather, they include the shaving brush tree (*Pseudobombax ellipticum*), Pride of Burma (*Amherstia nobilis*) and queen’s wreath (*Petrea volubilis*). These spectacular plants are the horticultural legacy of Dr. David Fairchild and the explorers who have followed in his footsteps. They provide a breathtaking glimpse of a world that is rapidly disappearing.

At this year’s annual members’ meeting we were reminded of the incredible impact Dr. Fairchild had on horticulture and plant conservation worldwide. Dr. Richard Campbell, the garden’s director of horticulture and senior curator of tropical fruit, delivered a presentation on Dr. Fairchild’s legacy and how it has shaped our work. Like Dr. Fairchild, Dr. Campbell and his team approach the tropical world with enthusiasm and a spirit of adventure. Along with colleagues throughout the tropics, they constantly work to discover new plants and introduce them to science and horticulture.

We have an increasing sense of urgency about this work, knowing we are racing against time to study tropical habitats before they disappear. We know some of our favorite plants have an uncertain future. A good example is the incredible jade vine (*Strongylodon macrobotrys*, featured on the cover of this issue), which Dr. Fairchild encountered in the Philippines in 1939. A major spring-flowering attraction in our Vine Pergola and in tropical gardens throughout the world, it is now vulnerable to extinction in the wild as its natural rainforest habitat disappears. The jade vine can be difficult to propagate in cultivation, suggesting that the wild populations may be critical for the long-term survival of the species.

Many plant species have already been lost from the wild, only clinging to life in scattered botanic garden collections. In our collection, the palms *Corypha taliera* and *Cryosophila williamsii* and the cycad *Encephalartos woodii* fall into this category. Like living ghosts, those plants are just a shadow of the vibrant populations that once existed in the wild.

Now more than ever, we understand that our job does not end here when plants arrive in our landscapes. We have an increasing focus on conserving the natural habitats that hold the greatest diversity of tropical plants. We now have many projects underway to understand the threats to natural habitats worldwide and develop large-scale conservation strategies.

For instance, Conservation Biologist Dr. Joyce Maschinski leads our efforts to study and conserve natural pine rockland and coastal dune environments here in South Florida. Her team has successfully restored important local habitats that hold unique plant species. International conservation officer, Melissa Abdo, is leading a project to conserve threatened habitats in Jamaica using data gathered during historic and modern botanical expeditions. In this issue, graduate student Brian Machovina and his advisor Dr. Kenneth Feeley explain how satellite imagery provides up-to-the-minute data on the health of important tropical habitats worldwide. Also in this issue, Dr. Hong Liu describes what happens when an important habitat is identified, and how conservation efforts may be challenged by scientific questions and political complexity. Through all of our work, we aim to have a lasting positive impact on the fragile habitats that sustain the plants we enjoy in our landscape.

As our plants continue to put on their annual show, we celebrate the important work of our scientists and students in tropical habitats worldwide. I look forward to seeing you in the garden this spring,

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BRIAN MACOVINA is a Ph.D. student at FIU, where he is studying spatial distributions of banana cultivation, ecological comparisons of conventional and organic banana production, and suitability modeling for future banana expansion. He is also the inventor of yonanas, a kitchen appliance that makes a healthy alternative to ice cream from frozen bananas and other fruits.

Marilyn Griffiths has been a plant recorder at Fairchild for 16 years. Working in the Horticulture Department, she is responsible for maintaining data on all plants in the garden through inventories, maps and the database. Signage for plants as well as accession tags are a large part of her responsibilities. She also co-manages the Horticulture Library and maintains Fairchild’s weather station.

Jeff Wasielewski is a marketing and multimedia associate for Fairchild, where he works as a writer, editor and videographer. He holds a master’s degree in education from the University of Miami and is an adjunct professor at Miami Dade College, where he teaches horticulture. He loves the plants and natural areas of South Florida and enjoys sharing them with his 10-year-old daughter, Samantha.

Dr. Hong Liu joined Fairchild’s Center for Tropical Plant Conservation in August 2008 as a research ecologist. She also has a joint appointment as an assistant professor at the Department of Environmental Studies, Florida International University, where she teaches restoration ecology and invasive species ecology. She has a wide range of research experience, including the conservation ecology of orchids.

On the Cover
Jade vine
Strongylodon macrobotrys
Photo by Gaby Ortuzar/FTBG
Growing with the community

South Florida is a place where beautiful things grow. It’s a place where the roots of the community are deep.

Baptist Health has been a part of that growth — and of this community — for 50 years. With a reputation for great care, we score higher than all other hospitals in Miami-Dade and Monroe counties in patient satisfaction, based on the latest U.S. government survey of hospital patients.

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EVENTS AT FAIRCHILD

THE FOOD AND GARDEN FESTIVAL FEATURING THE 32ND ANNUAL SPRING PLANT SALE
Saturday and Sunday
April 30 and May 1
9:30 a.m. – 4:30 p.m.
Join us for a celebration of local foods and the gorgeous gardens they grow in, then take home spectacular plants from our Spring Plant Sale. Sponsored by Whole Foods Market.

MAY

ART AT FAIRCHILD
Through May 31, 2011
The art of Les Lalanne and Yoko Ono’s Wishing Grove
9:30 a.m. – 4:30 p.m.

FAIRCHILD’S PLANTS AND PEOPLE:
Program for Alzheimer’s
Monday, May 2 and Monday, May 16, 11:30 a.m.
Reservations required for this free program for people living with Alzheimer’s. 305.667.1651, ext. 3388

MOVIES AT FAIRCHILD
Friday, May 6, Legend of the Guardians: The Owls of Ga’Hoole
Friday, May 20, Eat Pray Love
8:00 p.m. Gates open at 7:00 p.m. Admission: $10 for Members, $15 for Non-members, $8 for Members children, $10 for Non-member children, free for children 5 and under.

PLANT ID WORKSHOP
Friday, May 6
1:00 p.m.
Space is limited to the first people that reserve online at www.fairchildgarden.org/plantid

PLANT SALE
Presented by the Tropical Flowering Tree Society
Saturday and Sunday
May 7 and 8
9:30 a.m. – 4:30 p.m.

MOTHER’S DAY BRUNCH
Sunday, May 8
10:30 a.m. – 2:30 p.m.
For information and reservations please call 305.256.8399

MOTHER’S DAY TEA
Sunday, May 8, 3:00 p.m.
For more information please call 305.663.8059

THE FAIRCHILD CHALLENGE PRESENTS: SCHOOL AWARDS CEREMONY
Join the celebration as we reveal the top Fairchild Challenge schools.

Elementary Schools:
Tuesday, May 10
5:30 p.m. – 6:30 p.m.

High Schools:
Thursday, May 19
6:30 p.m. – 8:30 p.m.

PLANT SALE
Presented by the American Bougainvillea Society
Saturday and Sunday
May 14 and 15
9:30 a.m. – 4:30 p.m.

MEMBERS’ LECTURE
Wednesday, May 18
6:00 – 8:00 p.m.

PLANT SHOW AND SALE
Presented by the South Florida Cactus and Succulent Society
Friday, Saturday and Sunday
May 27, 28 and 29
9:30 a.m. – 4:30 p.m.

JUNE

PLANT ID WORKSHOP
Friday, June 3, 1:00 p.m.
Space is limited to the first people that reserve online at www.fairchildgarden.org/plantid

PLANT SHOW AND SALE
Presented by the Tropical Fern & Exotic Plant Society
Saturday and Sunday
June 4 and 5
9:30 a.m. – 4:30 p.m.

CELEBRATION TEA
Sunday, June 5, 3:00 p.m.
For more information please call 305.663.8059

PLANT SALE
Presented by the American Bamboo Society
Caribbean Chapter
Saturday and Sunday
June 11 and 12
9:30 a.m. – 4:30 p.m.

MEMBERS’ LECTURE
Wednesday, June 15
6:00 – 8:00 p.m.

JULY

PLANT ID WORKSHOP
Friday, July 1
1:00 p.m.
Space is limited to the first people that reserve online at www.fairchildgarden.org/plantid

MANGO SYMPOSIUM
Friday, July 8
10:00 a.m. – 5:00 p.m.
For more information, please call 305.661.1651, ext. 3377 or email astamps@fairchildgarden.org

THE 19TH ANNUAL INTERNATIONAL MANGO FESTIVAL
Featuring the Mangos of Hawaii
Saturday and Sunday
July 9 and 10
9:30 a.m. – 4:30 p.m.

INTERNATIONAL MANGO FESTIVAL BRUNCH
Sunday, July 10
11:00 a.m.
RSVP at 305.667.1651, ext. 3358 or jbaldwin@fairchildgarden.org

AUGUST

FREE SUNDAYS AT FAIRCHILD
Every Sunday in August
9:30 a.m. – 4:30 p.m.

PLANT ID WORKSHOP
Friday, August 5, 1:00 p.m.
Space is limited to the first people that reserve online at www.fairchildgarden.org/plantid

This schedule of events is subject to change. For up-to-the-minute information, please call 305.667.1651 or visit www.fairchildgarden.org/events

Events generously supported by:

Whole Foods
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THE EXPLORER PROGRAM GETS A VISIT FROM FAIRCHILD’S GRADUATE STUDENTS

Second grade students from William Lehman Elementary School got an extra treat on Friday, February 4 during their Explorer field study program. Three of Fairchild’s graduate studies students, from Florida International University and the University of Miami, spoke with the second graders about their scientific research, which includes pollination, native habitats and fruit diversity. The second graders were very interested in the work of the graduate students and asked a number of insightful questions. As a part of the continuing growth of our education programs, all of our Fairchild graduate students will have the opportunity to interact with the K-12 students and inspire the next generation of scientists.
NEWS

LET THE HERBARIUM IDENTIFY YOUR MYSTERY PLANTS

Is there a plant in your garden that you just can’t identify? Bring it to Fairchild’s Herbarium and let our scientists uncover its origin! Bring your plant specimen to Fairchild’s Herbarium on the first Friday of every month at 1:00 p.m. and participate in our Plant Identification Workshop. Space is limited to the first 12 people who reserve online at www.fairchildgarden.org/PlantID. Please bring only real specimens—no photographs. The Fairchild Herbarium is located at 11935 Old Cutler Road in Coral Gables.

MANAGING AN INVASIVE MANGROVE

Fairchild hosted representatives from the Everglades Cooperative Invasive Species Management Area (ECISMA), to help locate and eradicate a newly recognized invasive exotic mangrove called Lumnitzera racemosa that has appeared at Fairchild. More than 100 plants were treated or removed from the property. Most of them were small plants, suggesting that previous removal efforts have been effective. We would like to thank all those who participated, including the Florida Fish and Wildlife Conservation Commission, the National Park Service, Everglades National Park, Loxahatchee NWR, J.N. “Ding” Darling, the National Wildlife Reserve, Miami-Dade County Parks and Recreation, the South Florida Water Management District, Habitat Restoration Resources, Aquatic Vegetation Control and Fairchild Staff. The ECISMA is a formal partnership between government agencies, tribes and other interested groups that manages invasive species in our geographic area.

NIH FUNDS GENETIC RESEARCH INTO ENDANGERED CACTUS

A National Institutes of Health-funded fellowship will support key genetic diversity research on the endangered Keys Tree Cactus, Pilosocereus robinii. The NIH awarded the fellowship to Fairchild Tropical Botanic Garden and Florida International University graduate student Tonya Fotinos, as part of its MBRS-RISE fellowship (Minority Biological Research Support—Research Initiative for Scientific Enhancement). Administered by FIU, this fellowship will support Fotinos as she develops molecular markers to determine whether remaining populations are reproducing sexually. She will also identify good candidate populations for ongoing reintroduction efforts. The support of this program goes beyond this particular fellowship, showing how we can adapt medical researchers’ technological advances in genetics for use in conservation.
The loquat, *Eriobotrya japonica*, is a tasty fruit native to Asia, and is also known as the Japanese plum or nispero japonés. It has been cultivated in Japan since antiquity, where it is found throughout the urban landscape, shaped in different sculptures. In the United States, loquats grow in Hawaii, California and Florida.

Bearing heavy foliage of handsome, long, green leaves with fragrant white blossoms, the loquat rewards the Floridian owner during spring with clusters of fruit in yellow to dark orange, depending on the variety planted. This fruit has smooth skin, and when fully ripe its flavor can be compared to a cherry with floral overtones.

This highly cold-tolerant member of the pome fruit family can be grown throughout much of Florida. Local nurseries carry several grafted varieties, including ‘Golden Nugget,’ ‘Champagne’ and ‘Tanaka.’ All three varieties will grow and fruit well here in South Florida.

All varieties should be planted in the late spring. In the first years the branches should be tipped to encourage the formation of a well-branched canopy. A tree that has been pruned will bloom earlier than a canopy without pruning. Trees should be fertilized three times per year during the rainy season. In the home landscape, the loquat does not require irrigation once it is established. Loquats can be used as a specimen plant or as a shade tree for the patio or terrace. It is easy to grow, practically maintenance free, and does well in containers. It can also be espaliered (grown against a wall).

Loquats will grow in a wide range of soil types and conditions. However, in South Florida’s limestone-based soils they may experience minor element deficiencies that can be corrected with special applications of foliar nutrient sprays. Avoid poorly drained locations for loquats since they do not tolerate flooding.

To guarantee good fruit quality, cover the growing fruit with an adequately large paper bag to protect it from fruit flies. This must be done when the fruit are small. Loquats are chiefly eaten fresh, but the Chinese sometimes stew them with meat and chicken or pickle them. In India, where loquats are often called May apples, cooks prepare them in spiced chutney. In Mexico loquats are used to flavor aguardiente de caña—sugarcane liquor.

The loquat should satisfy any garden gourmet as it can be eaten fresh or cooked for preserves, jam, jellies or pies. Dr. David Fairchild referred to loquat jams as a delightful gustatory experience.
Spring brings a transformation to our garden. After our normally cool, dry winter, our collections welcome the warmth and rains of May and June. Throughout the garden, palms, trees, shrubs and wildflowers produce new foliage. Many require this change in climate to flower, while others prefer the dryness of winter. Below are a few species that flourish in our delightful spring weather.

One very special plant in our Arboretum is a large shrub collected by Dr. David Fairchild on the Cheng Ho Expedition in the Celebes (now Sulawesi) in 1940. 1. **Clerodendrum minahassae var. brevitubulosum** was planted in Plot 51 in March of 1941. Those six plants have grown into a diminutive forest of stems that produce distinctive white flowers with long tubes. The most unusual part of the plant, however, is its fruit. Five deep red waxy arms (the calyx) form a star with a deep blue fruit in the center.

2. **Portlandia proctorii**, in the same family as coffee and gardenia, is endemic to the limestone cliffs of Jamaica. Glossy dark green leaves are a perfect backdrop to deep pink flowers. This species was named in honor of George Proctor, a botanist who has worked in Jamaica for many years. Our specimens can be found in Plots 41c and 44 in the Arboretum.

3. **Cornutia pyramidata**, tropical lilac, is growing just to the south of the **Clerodendrum** in Plot 51. This lovely shrub has large, deep green leaves and a tall spike of lavender blue flowers. The leaves have an unusual pungent fragrance. It is native from Mexico to tropical America. Our specimens were planted in 1949. Plot 39, also in the Arboretum, contains our main collection of plants in the family Rutaceae, the citrus family. Cousin to the orange and key lime, 4. **Ravenia spectabilis** produces brilliant pink flowers among small lustrous green leaves. This showy small shrub attracts swallowtail butterflies as well as hummingbirds. It is native to Cuba and Hispaniola (the island of Haiti and the Dominican Republic).

To the north of the railing at the Bailey Palm Glade is a spectacular specimen of 5. **Jacaranda cuspidifolia**. Unlike the more commonly planted species, *J. mimosifolia*, this species blooms within a few years of planting. It has larger and deeper blue flowers as well and is native from Brazil to Argentina.

Our website is an invaluable resource for plant information, horticultural advice and news of plants at Fairchild. Visit www.fairchildgarden.org/Blooming to find what’s blooming this month.

A plot map of the garden is available at the Visitor Center and at the South Gate booth. On the reverse there is a current list of flowering plants. Ask one of our friendly volunteers at the desk for a copy. A complete list of plants in the garden is also at the Visitor Center desk. Browse through the botanical names or the common names to locate a plant of interest.
Learning at Fairchild

Engaging more than 100,000 learners and growing!
Celebrating nature • Cultivating minds • Inspiring action

Learning is at the heart of virtually every program at Fairchild Tropical Botanic Garden. Educational opportunities are available for all ages, including general and specialized audiences, locally and around the world.

For information about our programs, please visit www.fairchildgarden.org.
Growing the Fairchild Challenge Pipeline

By Amy Padolf. Photos by Education Staff/FTBG

The Fairchild Challenge is built on a three-part philosophy that says: Basic scientific and environmental concepts must be introduced early and reinforced continuously throughout the education process.

1) Problem solving using critical and creative thinking and scientific reasoning
2) Formulating strategies to locate, evaluate and apply information
3) Demonstrating knowledge of diverse cultures, including global and historical perspectives
4) Creating strategies that can be used to fulfill personal, civic and social responsibilities
5) Demonstrating knowledge of ethical thinking and its application to issues in society
6) Understanding how natural systems function and recognizing the impact of humans on the environment

The success of the Fairchild Challenge for Elementary Schools program has led to an expansion in the educational pipeline. Just six months after the program's expansion, we are adding another level: college undergraduate students.

Beginning this year, 160 college undergraduates are participating in a pilot program, thanks to a partnership that began in January with Miami Dade College’s Kendall Campus.

During the last nine years, Fairchild has established an effective multidisciplinary environmental education structure that allows us to reach a broad audience and make connections with students. The Fairchild Challenge is built on a three-part philosophy that states:

1) Basic scientific and environmental concepts must be introduced early and reinforced continuously throughout the education process.
2) Access to inquiry-based education helps students develop creativity and enthusiasm for discovery—key attributes of successful innovators.
3) Mentorship is crucial for engaging and encouraging students from all demographic groups.

Through this basic philosophy, we are creating a pipeline that engages and actively involves students in environmental education and stewardship, beginning in elementary school and continuing through college.

With the leadership of two inspiring social science professors from Miami Dade College’s Kendall Campus—Sandra Castillo and Jose Guntin—we have filled a missing component in the pipeline: undergraduate students. Inspired by the newly adopted Miami Dade College 10 Learning Outcomes, Guntin and Castillo were looking for opportunities to partner with the community to give their students multidisciplinary learning experiences that achieve these goals, which include:

- Problem solving using critical and creative thinking and scientific reasoning
- Formulating strategies to locate, evaluate and apply information
- Demonstrating knowledge of diverse cultures, including global and historical perspectives
- Creating strategies that can be used to fulfill personal, civic and social responsibilities
- Demonstrating knowledge of ethical thinking and its application to issues in society
- Understanding how natural systems function and recognizing the impact of humans on the environment
Castillo and Guntin were already developing their own project, called the Transcendental Transpersonal Project (TTP), which began with discussions of Ralph Waldo Emerson and his philosophy of self reliance—a framework that allowed the pair to incorporate environmental issues, including sustainability and conservation, into the core curriculum. After learning about the Fairchild Challenge, they realized that this structure works brilliantly within their context. “The idea is that a good learning environment goes beyond the boundaries of the classroom. Students at this level need to be empowered with civil responsibility,” Guntin says.

With these concepts in mind, the Fairchild Challenge High School staff created two unique activities that integrate the social sciences with environmental thinking. The first is a collaborative effort to create an environmental action plan. Students work with their peers to come up with a personal action plan, including pledges to modify their own behavior. The plans need to reflect an understanding of sustainability, as well as ethical thinking and action and personal responsibility. The second activity has students choose from three different prompts to write nature-inspired essays on the concept of living simply, living deliberately or environmental stewardship. Henry David Thoreau’s concepts of living deliberately and connecting with nature provide further inspiration for the essays.

As with all Fairchild Challenge options, these students’ work will be submitted to Fairchild to be evaluated by an external panel of community experts, volunteers, professionals and staff. Competing students will be honored at the Fairchild Challenge High School Awards Ceremony at Fairchild from 6:30 – 8:30 p.m. on Thursday, May 19th.

Ultimately, it is our goal to engage students from other Miami Dade College campus sites as well as other universities and expand the Fairchild Challenge Pilot Program for undergraduate students. In the future, it is our plan to incorporate work-study opportunities for students to act as mentors and facilitators in local elementary, middle and high schools involved in the Fairchild Challenge.
his April, I directed the debut of the “O, Miami” poetry festival. The festival’s goal was for every single one of Miami-Dade County’s 2.5 million residents to encounter a poem. To help make that goal a reality, poets visited Fairchild during April, creating new works of art that will become part of the Garden’s fabric.

O Miami began on the morning of April 1st with a ceremony at the Adrienne Arsht Center for the Performing Arts and won’t stop until the Poet Laureate of the United States, W.S. Merwin, reads at the Frank Gehry-designed New World Symphony campus on April 30th. By that time, more than 50 poets will have read their works across Miami-Dade County in a variety of venues. Almost 30 different community projects will have taken place simultaneously. Miami will have been turned into a jungle of poetry, a fecund field of verse giving Miamians and tourists alike an opportunity to experience our metropolis in a completely novel way.

Early on, we targeted Fairchild Tropical Botanic Garden as one of the places we wanted to transform with poetry. One of my first dates with my wife was to Fairchild to see the first Dale Chihuly art exhibit, and I remember how struck I was by the intertwining of modern art and natural beauty—how suddenly I saw everything around me as much more connected than I’d assumed. Actually, I don’t have to remember because I wrote a poem about it when I got home.

No wonder you want to touch a crop of metallic green stems until I stop you, and as we touch, we also become a thing to be categorized, a crop in motion, a helix of skin and cotton

There’s more obviously, but the point is not the poem. It’s that the exhibit inspired me to interact with it, to make my own artistic gesture in response. And that’s exactly the spirit we tried to inject into O, Miami. Like Fairchild, we believe art should intertwine with everyday life. Art should help break down barriers of class, taste and accessibility, and it should improve more than just an empty white wall.

How fortuitous then that our guest of honor, the Poet Laureate of the United States, W.S. Merwin, is a palm collector! He lives on the island of Maui, Hawaii, where he and his wife have turned their 19 acres of land into a conservancy teeming with more than 800 species of palm. He’s even been credited with saving a species of palm, Hyophorbe indica. He also has a long relationship with Fairchild, having visited many times. And, as he told me over the phone a few weeks ago, Fairchild has even given him seed.

When President Obama asked Merwin what the theme of his laureateship would be, Merwin said, “The fact that there’s no separation between human imagination and the rest of life. It’s all part of us. It should be part of our joy and our pleasure. When we destroy the world, we’re destroying ourselves.”

We attempted to honor Merwin’s vision by bringing poets into Fairchild to write about the flora and fauna. And then the amazing Fairchild staff turned that work into a poetic guide to the garden, which, like Chihuly’s glass sculptures, wrapped itself into the fabric of the landscape. Our goal: to remind Miami that artistic expression and the natural world are not just complimentary—to lose one means losing the other.

I sincerely hope you’ll stop to read the poems in the O, Fairchild program or to look for the poems placed around the garden. Who knows, maybe you’ll even write your own.

Poet and author P. Scott Cunningham is the founder of the Miami-based University of Wynwood, which curates events and projects related to contemporary literature. A poetry teacher, he is director of O, Miami.

The O, Fairchild program is available at the visitor center.
Don’t miss the tours at Fairchild

FAIRCHILD TROPICAL BOTANIC GARDEN

Tram Tours
Enjoy the beauty of the garden on this complimentary, narrated tour of Fairchild’s 83 gorgeous acres.
Year Round
All tours last approximately 45 minutes each. Tours do not run during festivals.

Regular Schedule
Monday through Friday
Start on the hour 10:00 a.m. to 3:00 p.m.
Saturday and Sunday
Start on the hour 10:00 a.m. to 4:00 p.m.

Spanish Tram Tours
Sundays beginning at 2:30 and 3:30 p.m.
January through April, 2011 there will also be Spanish tours at 2:30 and 3:30 p.m. on Saturdays.
Spanish tours are also available on weekdays for groups who make reservations.
Two week advance notice is required.

Guided Walking Tours
Discover the Tropics Walk Corridor
Monday through Friday, through May 30, 2011
Find out what makes the tropics so special on this informative walk.
10:30 and 11:30 a.m. beginning at the Visitor Center.
May cover the vine pergola, arboretum, native plants, flower garden.
1:30 p.m. and 2:30 p.m. beginning at Cycad Circle.
May cover the Palmetum, Rainforest and cycads.
Tours last approximately 45 minutes.

Butterflies and their Host Plants Walk
Every Saturday and Sunday
Learn about butterflies and the plants that sustain them.
10:00 a.m. beginning at the Visitor Center.
Tours last approximately 1 ½ hours.

Photos by Gaby Orlando/FTBG and Volunteer Department Staff/FTBG
Part awards ceremony, part culinary experience and part family reunion, the brunch is certainly one of Fairchild’s most beloved events.

Fairchild volunteers gave more than 67,000 hours of service to Fairchild last year. In order to celebrate this tremendous achievement, Fairchild staff prepared our annual one-of-a-kind Volunteer Brunch on March 16, 2011.

Part awards ceremony, part culinary experience and part family reunion, the brunch is certainly one of Fairchild’s most beloved events. Often described by volunteers as “the best buffet anywhere,” the Volunteer Brunch features homemade dishes prepared by our staff. It’s a small way we can thank the volunteers for the countless ways they contribute to the advancement of Fairchild’s important mission.

One of the highlights of this year’s Volunteer Brunch was the presentation of the Bertram Zuckerman Volunteer of the Year Award to Stuart Debenham, Bobbe Dooley and Roberta Turner. The award is named for the first Volunteer of the Year, Bert Zuckerman, who was honored in 1988. Bert was instrumental in the formation of Fairchild’s volunteer program, which culminated in the creation of the Friends of Fairchild organization. Bert also wrote *The Dream Lives On*, a history of Fairchild from 1938-1988, which ensured that the garden’s story would continue to be told to future generations. This year’s Volunteers of the Year wonderfully exemplify this same sense of history and long-term dedication to Fairchild.

Bobbe Dooley became a Fairchild volunteer in 1975 when she created The Ramble’s popular Palm and Pandanus Weaving booth, an icon of the festival for decades. Bobbe led palm and pandanus weaving classes for volunteers for months before the festival and raised thousands of dollars for the garden through the sale of the group’s hats, baskets and renowned grasshoppers. A long-time Miami realtor, Bobbe has also been a terrific goodwill ambassador for Fairchild, offering a membership to people who bought homes from her real estate business and often speaking about the garden to the Miami business community. “What’s been especially rewarding about my volunteer work at Fairchild is the camaraderie and enthusiasm of fellow volunteers. I have made lifelong friends with people I have met at Fairchild, and the friendly and caring staff of the garden has been the icing on the cake,” Bobbe says. She continues to support the garden at special events and currently serves on the board of the Friends of Fairchild.
The Volunteers of the Year, through their long-time dedication, commitment and hard work, have created the foundation on which the garden is building an exciting future. We salute their remarkable achievements!

Roberta Turner and Stuart Debenham are curators of another beloved Ramble tradition, the Old and Rare Books booth. A perennial favorite, the Old and Rare Books booth now fills two whole rooms at Ramble, and it is successful year after year thanks to their tireless efforts and attention to every detail. During just the last 10 years under Roberta and Stuart’s excellent leadership, the Old and Rare Books Committee has contributed well over $100,000 to Fairchild.

Roberta, who became a Fairchild volunteer 39 years ago, began her tenure as co-chair of the Old Books committee in 1993. She has been the group’s cornerstone with her calm, thoughtful manner, knack for organization and ability to cultivate and coordinate hundreds of volunteers. Long-time books volunteer Sandy Cummings describes Roberta as “efficient and on top of everything. She is kind and wonderful with her volunteers, making everyone feel like they are part of the team, useful and appreciated.”

Stuart Debenham joined Roberta as Co-Chair of Old and Rare Books in 2001. A retired library administrator, Stuart brings invaluable professional expertise to the committee. He volunteers a thousand hours each year collecting, pricing, sorting, and packing books, and he moves several tons of books each year in the process. Fairchild could not have found a more qualified person than Stuart to co-chair this committee. Not only does he bring knowledge and experience to the job, he also brings enthusiasm which he shares with those who donate the books, and with the thousands of people who patronize the book sale on Ramble weekend.

The Volunteers of the Year, through their long-time dedication, commitment and hard work, have created the foundation on which the garden is building an exciting future. We salute their remarkable achievements!
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PLANTS OF THE YEAR 2011

By Mary Collins, Marilyn Griffiths and Martha Kent

For seven years, Fairchild Horticulturists have selected plants that represent true horticultural excellence. We call these our Plants of the Year, and we are pleased to announce the new slate of winners for 2011.

Past winners include:

- Byrsonima lucida, locust berry
- Clusia lanceolata
- Coccothrinax argentata, silver palm
- Cryosophila stauracantha, root-spine palm
- Euphorbia punicea, flame of Jamaica
- Cuauñacum sanctum, lignum vitae
- Muhlenbergia capillaris, muhly grass
- Myrcianthes fragrans, Simpson’s stopper
- Nashia inaguensis, Moujean tea
- Neomarica caerulea, twelve apostles
- Neoregelia ‘Fireball’
- Pimenta racemosa, bayrum
- Plumeria pudica, bridal bouquet
- Senna polyphylla, desert senna
- Stemmadenia litoralis, milky way tree
- Tecomantle dendrophila, New Guinea trumpet creeper
The 2011 Plants of the Year are two very different plants. Each has distinctive characteristics to add interest to your garden—for humans and for wildlife. *Hamelia patens* is a supreme wildlife attractor, drawing birds and butterflies with colorful flowers and abundant nectar. *Petrea volubilis* creates profuse clusters of stunning blue-purple blossoms. Look for these plants at our upcoming plant sales.

**Petrea volubilis**

**Botanical name:** Petrea volubilis  
**Family:** Verbenaceae  
**Common name:** Queen’s wreath, sandpaper vine  
**Native to:** Central America, Brazil to West Indies  
**Habit:** Evergreen vine  
**Flower:** Blue-purple clusters in late winter and spring  
**Growing conditions:** Full sun, well-drained soil, no irrigation once established  
**Propagation:** Seed, cuttings, air layers  
**Comments:** Climber suited for trellis or other support or can be shaped into a scrambling shrub  
**Locations in Fairchild:** In front of the Garden House and in the courtyard behind the gallery building

*Petrea volubilis*, known as Queen’s wreath, produces masses of blue to purple flowers in 12-inch-long spikes in spring and during other dry periods as well. Native from Mexico through Central America, the Queen’s wreath thrives in a hot, sunny location and once established, needs no irrigation. It may be planted in a western exposure and will delight you with a wonderful show of flowers in spring. Sometimes known as sandpaper vine, the texture of the leaves is like fine sandpaper. This vine may be grown on a trellis, fence, or wall, or trimmed as a scrambling shrub with no support. An interesting ornamental trait of Queen’s wreath is that, while the blue-purple flowers last only a few days, the showy purple calyces remain, fading to blue then finally to pale gray, which is attractive against the dark foliage. As the flowers fade they fall in a pinwheel fashion, bringing one last delight.

**Hamelia patens**

**Botanical name:** Hamelia patens  
**Family:** Rubiaceae  
**Common name:** firebush  
**Native to:** Peninsular Florida, the West Indies, Mexico, Central America and South America  
**Habit:** Evergreen shrub to small tree with multiple trunks that grow to about 10 feet high  
**Flower:** Clustered slender orange-red tubular flowers on red stems throughout the year  
**Fruit:** Small rounded reddish berries ripening to dark purplish-black  
**Growing conditions:** Any well-drained soil in sun to partial shade  
**Propagation:** Seeds or soft wood cuttings in spring  
**Comments:** Fast growing plant ideal for attracting butterflies and birds, including hummingbirds  
**Location in Fairchild:** In Plot 3a, south of the Vine Pergola

*Hamelia patens*, firebush, is a shrub to small tree with showy red-orange flowers all year. A South Florida native, the firebush is a wonderful ornamental choice for attracting wildlife to your garden. Hummingbirds and butterflies visit the ubiquitous flowers for nectar and many types of birds, especially mockingbirds and catbirds, love the dark red to black fruit. The leaves are also colorful, with red veins and petioles. Firebush may be grown as a shrub or shaped to make a small tree. It can be planted in full sun or light shade and requires no irrigation once established. Firebush is a fine plant that can be used as an accent or combined with other plants in a butterfly garden or hedge.
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THE FAIRCHILD FARM

Art & science camp at the Fairchild Farm
July 11 - August 5, 2011
Children ages 6 - 10

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This program is made possible with the support of the Miami-Dade County Department of Cultural Affairs and the Cultural Affairs Council, the Miami-Dade County Mayor and Board of County Commissioners. The Summer Camp at the Fairchild Farm is funded in part by the Children’s Trust. The Trust is a dedicated source of revenue established by voter referendum to improve the lives of children and families in Miami-Dade County.

The Art and Science Summer Camp at the Fairchild Farm (part of Fairchild Tropical Botanic Garden) is located at 14885 SW 248 Street, Redland, FL 33032. The Fairchild Farm has 20 acres in the agricultural district of Miami-Dade County and is a genetic facility which contains Fairchild's living fruit tree collection including mangos, avocados, jackfruit, Spanish lime, sapodilla, canistel, mamey, caimito and others.

FAIRCHILD TROPICAL BOTANIC GARDEN
Pimenta racemosa, bay rum, is native to northern South America and the West Indies. The dark green, shiny evergreen leaves produce a wonderful spicy aroma throughout the year when crushed. The trunk and main branches have interesting bark, which peels to expose lighter shades. It is a small-to-medium-sized upright tree between 15 and 25 inches tall, bearing fragrant white flowers followed by black oblong berries. *Pimenta racemosa* leaves contain aromatic oil similar to clove. This essential oil is extracted from the leaves through distillation and is an ingredient of bay rum cologne. Lemon-scented bay rum is a naturally occurring form of *Pimenta racemosa*, and the tree is closely related to the aromatic allspice tree. This species is best grown in full sun. Once established, it is drought tolerant.

Neoregelia ‘Super Fireball’ is a small undescribed species of bromeliad with deep maroonish-red foliage that forms rosettes five to eight inches across and four to six inches tall. It is one of the easiest bromeliads to grow and will develop maximum color during our dry season if placed in four to five hours of full sun. During dry periods, water twice per month. Whether *Neoregelia ‘Super Fireball’* is climbing up a tree, hanging off a branch, scrambling over rocks or creeping across mulch, this splash of wine-red color will add a dramatic focal point to your garden.

Passiflora pallens, pineland passionflower, is a state-listed endangered species native to pinelands and the sunny edges of hammocks in South Florida. It attracts several kinds of butterflies, including the Gulf Fritillary, Zebra Longwing and Julia. Pineland passionflower produces large white flowers followed by pale yellow fruits. This vine grows best in a sunny location. (It can be seen in Fairchild’s Butterfly Garden.)

Spring Plant Sale

The 32nd Annual Spring Plant Sale will take place during the Food & Garden Festival, April 30 – May 1, 2011. With the summer rains set to begin soon, this is the perfect time of year to obtain plants for your garden. This year we have many beautiful plants to add color and fragrance to your landscaping and attract butterflies and birds to your garden. Hundreds of species will be available at the sale, but for the best selection, plan on arriving at opening time. A small sampling of the species that will be available:

Shop our farmers’ market, where local growers showcase the best fruits, vegetables and herbs available in South Florida. Purchase edible plants adapted to our region, including plants from Fairchild’s own nursery. Hear lectures on growing your own edibles, sustainability and the local food movement. Gather new tips and recipes on how to use the fruits of your garden during culinary demonstrations taught by Miami’s top chefs.

For more information on the Food and Garden Festival, visit www.fairchildgarden.org/foodandgarden
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Every third Saturday of the month, an event of great horticultural and botanical interest takes place at Fairchild between 12:30 and 3:30 p.m.: American Orchid Society judging. The Florida Caribbean Judging Center brings together many of the top orchid experts in South Florida to evaluate orchid plants and flowers for prestigious American Orchid Society awards. Growers from Florida, and even points more distant, bring their most beautiful plants and flowers to be evaluated for the coveted awards. The awards are held in such high esteem because of the strict standards that the AOS judges apply, based upon a nationally adopted point scale. The judges of the Florida Caribbean Judging Center are extremely experienced and undergo lengthy training. A minimum of six years of training is required for judges to be certified, but most have many more years under their belts.

Indeed, training of judges is an ongoing part of the event. Before each session, judges-in-training present on the latest trends in orchid breeding and give updates on the latest botanical information on orchid species.

One of the AOS’s most important goals is education of the public in all aspects of orchid culture and aesthetics. That is why the public is invited to observe the judging process and to partake in the informational talks.

A vast amount of orchid knowledge is revealed each month, but above all the public is invited to see some of the most beautiful orchids in South Florida on display monthly in the Corbin Education building.

For more information, martinmotes@gmail.com.
conserving earth from space

Satellite images and data analysis are giving society a new vantage point on ecological systems.

By Brian Machovina and Kenneth Feeley
Have you ever looked up at a night sky to see a small, single point of light passing rapidly through the spectacle of stars above? That light likely comes from a man-made satellite on its way around the Earth. During a long evening gazing up at the inky night sky, you might see dozens of these technological marvels passing hundreds of miles above you. Indeed, in this era of global connectivity, hundreds of satellites orbit our planet, relaying phone calls, television signals, financial transactions and information about plants. Yes, plants.

When most people think of studying botany, they probably envision themselves following in the footsteps of Dr. David Fairchild and taking adventurous sea voyages and treks into remote jungles in far-off lands to collect unknown species. Perhaps they see themselves working in the laboratory to unravel the genetic secrets of ancient food crops, or even placing themselves literally in front of bulldozers to protect the last remaining populations of endangered plant species from the combined onslaughts of habitat loss and climate change. Sitting in a darkened room in front of a computer screen and analyzing millions of bits of data streaming in from satellites or airplanes may seem a far cry from botany, but the rapidly advancing sciences of Remote Sensing and Geographic Information Systems (GIS) have become critically important tools for helping us to understand the distribution, ecology and role of plants in a rapidly changing world.

Since the launch of the first Landsat satellite in 1972, scientists have been capturing and analyzing millions of environmental images of the Earth taken from space. Today there are dozens of research satellites circumnavigating the globe, each with a unique suite of technology and sensors that provides botanists and ecologists with eyes far more powerful and tireless than their own. Traditional field-based sampling can be time-consuming, prohibitively expensive and limiting when examining large-scale patterns in the structure and function of vegetation. Spaceborne and airborne observations, on the other hand, provide information about the distribution, extent and temporal dynamics of ecosystems at scales beyond anything that can be measured on the ground.

Seeing beyond the visible
Remote-sensing satellites all operate on a principle similar to that used in common digital cameras. Objects on the surface of the Earth reflect bands of the electromagnetic spectrum coming into the Earth as sunlight. An imaging spectrometer aboard the overhead satellite captures the reflected energy as it strikes each individual pixel on the instrument. But imaging satellites can go beyond the red, blue and
green bands of visible radiation that digital cameras collect. Some satellite sensors are designed to detect energy that the human eye cannot see: infrared or ultraviolet light. In fact, some “hyperspectral” imaging satellites may capture more than 500 bands of energy across a wide portion of the electromagnetic spectrum. This means that for each pixel of a captured image, the sensors are actually collecting hundreds of pieces of information about the intensity of radiation in each of these bands. These extra pieces of information can then be used to help distinguish vegetation types or even individual plant species, based on their “spectral signatures.”

Spectral signatures are the result of the unique ways that different plant species reflect and absorb energy from the sun. The surfaces of all leaves have complex three-dimensional structures that are composed of unique chemical bonds. Those bonds cause energy from the sun to be absorbed or reflected in specific patterns. Different species of plants differ in these chemical and physical properties, and as a result many species have unique spectral reflectance, or spectral signatures. By detecting these unique signatures, ecologists can analyze satellite images to locate and map individual species.

The spectral signatures of plants may also change with changing conditions inside the plant driven by environmental conditions or stressors. By examining changes in spectral signatures over time, ecologists can measure and monitor conditions such as chlorophyll content, leaf water content, biomass and nitrogen content, providing a valuable tool for investigating large-scale patterns in the function of ecosystems. For example, recent analyses of satellite images taken at different times of the year have revealed that the Amazon rainforest is actually “greenest” and has its greatest level of photosynthetic activity during the dry season. This finding goes contrary to common wisdom as most people, and indeed many scientists, expected that the rainforest trees should be water-stressed and therefore less photosynthetically active during the dry season. With the help of remote sensing we are learning that plant growth in the Amazon is instead mostly light-limited and that fewer cloudy days in the dry season drives higher productivity.

The images captured through remote sensing have an additional value in that they can also provide ongoing records of the dynamic changes to habitats caused by natural processes and human activity. Indeed, the most accurate estimates of global deforestation currently available to conservation biologists and land-use planners are all created by examining satellite images showing changes in forest cover over time. A never-blinking eye-in-the sky can also monitor protected areas for illegal deforestation or road construction—helping land managers to protect valuable natural resources in remote lands.

These different uses require different types of remotely-sensed images. For instance, the resolution of an image (the number of megapixels per picture) is an important factor in determining what type of questions the images can be used to address. Satellite sensors can capture images with a resolution as low as 30 meters, in the case of the Landsat satellite—meaning that each pixel of the image corresponds to an area on the ground covering 30 x 30 meters—to less than one meter on some of the newer satellite systems—meaning that each pixel of the image corresponds to an area of one square meter.
Even higher resolution images can be created by airborne sensors carried by planes flying closer to the earth’s surface than satellites. Digital imaging systems composed of Global Positioning Systems (GPS), dual high-resolution cameras, gyroscopes, lasers and radars mounted aboard single-engine aircraft have been used by plant ecologists to map sections of the Amazon rainforest down to 10 cm resolution. This technology can even be used to construct 3D models of the forest by taking images of vegetation at different heights above the ground.

Higher resolution isn’t necessarily better: Landsat images are valuable for determining coarse-scale patterns in vegetation, such as extent of different habitats. The higher resolution images are better for mapping locations of individual species over smaller areas.

Mapping carbon storage, in 3D
An increasingly important application of this technology is its use in estimating the carbon stored by forests. Using the 3D images obtained through remote sensing, individual trees can be measured for height, diameter and amount of foliage. This information can then be fed into sophisticated allometric models to estimate the biomass of each individual tree and the amount of carbon stored in leaves and woody tissue. Given the power and wide-reaching range of remote sensing, carbon storage can be measured over huge expanses of forest, providing a valuable baseline from which to monitor current carbon stocks and predict future trends under scenarios of deforestation and climate change.

Comprehensive information on carbon storage has become increasingly valuable as programs are put in place to reduce global carbon emissions. For example, under the proposed Reduced Emissions through Deforestation and Degradation scheme (REDD), major emitters of carbon in developed countries can offset their carbon release by paying for programs to halt or reduce deforestation in developing countries. Since every tree saved from the chainsaw prevents carbon from being released into our atmosphere, emissions are offset (cut trees release carbon as they degrade or are burned and no longer can help to take carbon out of the atmosphere through photosynthesis). But before corporations invest millions or billions of dollars in saving forests through REDD, it is critical to accurately quantify the amount of carbon sequestered in forests and how this changes through time—which is where remote sensing comes in.

To track deforestation and changes in land use, scientists perform analyses on the enormous number of remotely-sensed datasets that are...
Remote sensing and GIS give our society a vantage point that we have never had before. Think of it as a bird’s-eye-view from a winged species that can cross the boundary of time, retrieving records of our past and flying into our future.

now available. These datasets stretch back for decades and grow exponentially every year. Each set of data can be layered into a map like layers on a cake, and a wide variety of mathematical and statistical analysis can be performed to uncover historical patterns and ongoing trends among data sets, and to make predictions about the future. These map models, known as Geographic Information Systems (GIS), help ecologists quantify and predict changes in forest area and carbon stores. They also help society and its leaders foresee alternative development strategies.

For example, by incorporating past development patterns into GIS models, scientists have predicted that if agricultural expansion continues at the current trajectory, more than 40 percent of Amazon rainforests will be lost to the saw and plow by 2050. That is a drastic loss, especially considering that only 2.4 percent of the Amazon had been cleared by 1970. Models like this allow input of different specific strategies of development, producing predictions that land-use managers can then evaluate. The decision to cut a new dirt road into a forest or pave an existing dirt road will have different effects in the model. Scientists can show these effects visually in the maps, highlighting the impact of these decisions on forest loss decades into the future.

**Melding modern and indigenous knowledge**

One of the most exciting developments in conservation has been the melding of the modern technologies of remote sensing and GIS with powerful indigenous knowledge. Tribal communities in the Amazon have been employing “cultural mapping” to demarcate their territories and win legal title to lands. Just as valuable is the ability to catalog their cultural links to the land, mapping out areas where they hunt or use specific plants for food, construction or medicines, and thereby helping to identify areas of critical importance to a tribe’s future. This spatial catalogue empowers locals in their efforts to increase enforcement of environmental and cultural protection laws in the face of encroaching agricultural development.

A similar type of analysis can also be applied on a pan-tropical scale to evaluate the needs of indigenous tribes, natural forest conservation and the ongoing demand for development of agricultural areas. It has been estimated that in the next 40 years, in order to feed our growing global population we will need new zones of agriculture equal to the area of the United States. Where will future tropical agriculture occur? What are the best locations for agricultural or urban development given tribal lands, biodiversity, carbon storage and other variables? Balancing these issues is complex, and predicting the future is difficult. However, remote sensing and GIS give our society a vantage point that we have never had before. Think of it as a bird’s-eye-view from a winged species that can cross the boundary of time, retrieving records of our past and flying into our future, exploring different choices we might make and bringing back images of what our choices may eventually cause. Now that’s a bird certainly worth watching.

How will remote sensing and GIS progress and what does it mean for plants and conservation? There is a clear trend for ever-more-powerful sensors and computer analysis. The vision of the eyes-in-the-sky will grow clearer, more focused, and will be open to wider regions of the planet. What we need most, though, are more people to look through those eyes and share with the world what they see. This will enhance habitat protection, drive wiser use of resources, and in the end, create a healthier planet for plants and for people.

The next time you look up at night and see a satellite silently passing across the sky, remember that behind that satellite there might be a scientist using the global perspective to observe, study and protect the wonderful green world around us.
Fairchild’s annual giving program provides support for our critical work in tropical plant conservation, tropical science and research, horticulture and education.

Fairchild’s education programs reach more than 100,000 students annually, and with your help, we could reach even more students and help them learn about the importance of science and environmental stewardship, as well as experience Fairchild, one of the few remaining green spaces in Miami. Our scientists are saving native plants right here in South Florida. On an international scale, Fairchild is working with over 20 partners worldwide on conservation studies and wildlife management plans. We are also your community garden—a place of beauty and connection with nature.

But we need your help! Please take a moment and support the vital work of Fairchild Tropical Botanic Garden. It’s simple. Please send your gift in the enclosed envelope or you can call 305.667.1651, ext. 3377 or give online at www.fairchildgarden.org/DonateNow.
BEHIND
Two Men's
Golf
D THE SCENES
Men Who Helped the Garden Take Root

By Georgia Tasker
CHARLES CRANDON: Providing the Political Will

Of the many people who helped Col. Robert Montgomery establish Fairchild Tropical Botanic Garden, politician Charles Crandon was among the most important.

Crandon, the son of Quaker farmers, grew up in Acushnet, Mass., and played the church organ by age 11. Because he wanted to become a pianist or organist, he moved as a young man to New Bedford, Mass., where he rented an attic room and worked two jobs to take piano lessons.

He homesteaded for a year in Canada, was a salesman for a while and, after several vacations in Miami, decided to move here. He was only here a short time when he joined the Army’s 66th Balloon Corps in California. In that state, Crandon found not only natural beauty, but also roadside beautification efforts that he greatly admired.

After the war, when he returned to Dade County, he started the Crandon Wholesale Drug Co., and built it into the largest in the state. But his interest in parks and beautification did not go away. He decided to run for the county commission, hoping to add parks and trees to the growing metropolis.

That was 1929, and Charlie Crandon remained a commissioner for 20 years, shaping the county’s parks system as chair of the parks committee. In 1930, he asked W. J. Matheson to donate 70 acres of land for what would become Matheson Hammock, and 10 years later persuaded the Matheson family to donate more than 800 acres to create Crandon Park on Key Biscayne, in exchange for building the Rickenbacker Causeway. He also championed the planting of thousands of street trees and pushed for the development of the health department, the building of the Dade County Auditorium, the Seaquarium, and, yes, Fairchild Tropical Garden.

It was Crandon who worked out the deal with Col. Robert Montgomery to have the county accept 57 acres for the botanical garden, in exchange for work done on the garden by the Civilian Conservation Corps and, in the early days, funding of maintenance.
Here’s what Montgomery proposed to the commissioner: “My thought is to deed the 57 acres to the Fairchild Tropical garden and have the Fairchild Garden deed it to the County, with certain conditions regarding its use, and we would then turn over the 25 acres direct to the Fairchild Tropical Garden, with different conditions, but which would tie it up to the other property and with further provisions that it immediately be planted, and that a caretaker’s or superintendent’s house be erected with provision for further buildings.”

In an early memorandum to Crandon, the Colonel wrote, “I think I told you that last winter we had entirely too many sightseers—so many in fact that we are compelled to have a sign out at our gate stating that the place is closed to the public. I now have about 150 species and varieties of palms which can immediately be planted on the 25 acres. I plan, therefore, to call the 25-acre tract the Montgomery Palmetum of the Fairchild Garden.” The palmetum, he wrote, “will serve to increase the interest of the public in palms, and what is of more importance, it will greatly facilitate the study of palms by garden clubs, students and botanists.”

Montgomery paid for Fairchild’s irrigation system, and wanted the buildings to include a palm museum as well as heated glass houses and slat houses. His accounting firm, Lybrand, Ross Bros. and Montgomery, gave the money to build the museum. In addition, he proposed to the garden’s board of directors “instead of attempting to grow too many tropical plants in a region not free from frost, we arrange for a supplemental garden in Key West. Land might be acquired now while it is cheap and the development might be put up to the Key West people who hope that the new highway will tend to restore some of the old prosperity. Certainly a truly tropical garden would help a lot.” While that wish did not materialize, Crandon and Montgomery worked out the legalities of establishing the garden, and a few of their letters often reflect the Colonel’s impatience with the county and Crandon’s perception that Montgomery didn’t appreciate all that the county was doing for him.

For instance, in 1939, Montgomery fussed about the superintendent’s house not yet being funded or built, and Crandon reminded him that the Civilian Conservation Corps was working on Fairchild: “You appear to lose sight of the fact that you could not have acquired any work from the CCC boys without the consent of the county. Now then, for your information, 40% of the strength of the CCC Camp here has been diverted to work on the Fairchild Tropical Garden for the past six months….You should not, therefore attempt to minimize the help which the county has given you in that connection. Work means
money.” Three single-spaced typewritten pages later, Crandon cooled off enough to add, “It is not this writer’s purpose to quarrel with you upon these fine points, but rather a desire to clarify the situation.” Gradually, over the years, the business-like tones, and occasional foot stamping, mellowed. There was at least one other bump in the road, but our only hint of it comes in a letter from Montgomery written in June, 1940: “Dear Charlie, I have your letter of May 31st. I notice that you dictated it but did not read it afterwards. I think if you had read it over, you would not have sent it.” We do not know what Crandon wrote.

Crandon also was a huge admirer of Dr. David Fairchild, and in 1943 sent him a fan letter, informing him that the commission ordered 15 copies of _Garden Islands of the Great East_ to be distributed to local libraries and given to reviewers. He ordered six for himself to be given as gifts and asked Fairchild to autograph them. “PS—I have read several chapters of your new book and it is indeed splendid.”

Fairchild helped Crandon campaign for an aquarium in the mid-1940s, telling him how sorry he had been to see the sale of the Allison Aquarium and laboratory on Miami Beach during the real estate boom of 1925. Fairchild, who had studied at a marine biology lab in Italy as a young man, wrote: “Let us stop trying to peer into [the waters of Biscayne Bay] through a wooden bucket with a glass bottom. Bring the animals up where we can see them. But in doing this, let us not forget to build a marine biological station such as Dr. Walton Smith of the University of Miami has been waiting for and studying about for the past few years.”

A history of the University of Miami’s Rosenstiel School of Marine and Atmospheric Science says that complex now resides on Virginia Key, in part thanks to Crandon. As Dade County was ready to resume construction of the causeway from Miami to Virginia Key and Key Biscayne, Crandon proposed an aquarium be built there. The aquarium would be operated by the marine lab in exchange for land for a waterfront campus and a percentage of the admissions charge. Fairchild, his friend Thomas Barbour (head of Harvard University’s Museum of Natural History) and the National Geographic Society’s Gilbert Grosvenor joined Walton Smith on a boat trip to Bear Cut to choose the aquarium’s site.

Crandon’s interests spread beyond nature. He started the Miami Civic Music Association, and was frequently photographed for the society pages at various concerts. But he also was a gardener himself, and was famous for raising earthworms. He even wrote an article on earthworms and composting for _Organic Gardening_ magazine. In 1947, he took offense at a story in the _Miami Daily News_ making light of the importance of worms, and fired off a letter to the editor, which was returned. Unfazed, he wrote another to _The Miami Herald_, and sent a copy to Fairchild asking whether he concurred, writing, “It is so disappointing to see newspaper editors give such little thought and attention and have such little interest in matters of this kind.”

By 1948, after he retired from the county commission, Crandon was elected president of the garden. At that point, he wrote: “Dear Colonel, Will you please outline to me just what my duties are as President of the Garden?”

The colonel replied: “You can make out of the job whatever gives you the most pleasure. The only two presidents we have had were ornamental rather than useful. If you will set a date for the first meeting you can adjust yourself to circumstances.” Those two ornamental presidents, by the way, were Nell Montgomery and Dr. E. D. Merrill, director of the Arnold Arboretum.
THOMAS ANDERSON FENNELL: Acquiring Palms and Cataloging Planned Donations

Lee Fennell brought his family from Cynthiana, Ky., to Homestead in the early 20th century so that he might grow orchids. “My grandfather Lee had moved to the Orchid Jungle in 1923,” says Thomas Dudley Fennell, a retired psychiatrist who lives in Venus, Fla. “And Dr. Fairchild might have come down there, and they might have known each other before my father went to work at the Plant Introduction Station.”

Thomas Anderson Fennell, Dudley’s father, got a job at the station in 1928 as a laborer and plant propagator. By 1930, he was made acting superintendent, says Dudley, who was born that year and became David Fairchild’s godson. When Tom Sr. was made superintendent of the Plant Introduction Station, the family lived at Chapman Field.

And so when Col. Robert Montgomery sought a proper location for growing palms, he consulted Fairchild and Tom Sr. (Dudley’s brother, Tom Jr., who was famous for his Cattleya orchids, passed away in 1998.) It was Fennell, working in his spare time, who amassed the palms and cycads from around the state that Montgomery would plant at his new Coconut Grove Palmetum. As he acquired palms, Fennell submitted checklists to the Colonel, including their height and cost. They hoped that the embryonic collection would have many plants well established as seeds arrived from around the world. It was the Depression, and Fennell’s notes suggest that many good-sized palms could be purchased for what seems a small amount: “4 coconuts, 20-25 feet tall at $12 each; 5 Washingtonia robusta, 30-35 feet at $5 each.”

Fennell also compiled a complete list of palms and cycads—with descriptions and notes on the individual uses, such as oil, palm sugar, even “an intoxicating drink” made from berries of Euterpe ventricosa—that the Colonel wanted to give to Fairchild Tropical Garden. “The collection, as a whole, will be one of the largest in the United States,” he noted.
His grandson, Thomas A. Fennell III, who lives with his family in Coconut Grove, remembers that his grandmother Dorothy had been a teacher at Sunset Elementary School, and that she inherited a house in the Grove. His grandparents socialized in the Grove, and knew the area well. It was Tom Sr. and Dorothy, says Dudley, who introduced the Colonel to Eleanor Foster, who would become his third wife.

By 1935, Tom Sr. was sent to Beltsville, Md., as an administrator in charge of operations at the USDA’s large research complex. An orchid grower, he built a small orchid house for himself in Beltsville, where he hybridized orchids and developed techniques for raising them in tissue culture. He and Montgomery continued to correspond. On one occasion, he wrote to Montgomery: “We received the flower you had Mr. Jordahn send and were very much thrilled by it. Dorothy claims I admired it more than I did either of the children when they were first born.”

Montgomery also sent photos of the Coconut Grove Palmetum that ran in *The Miami Herald*, and with them a letter saying, “We are now engaged in some major changes. I am now excavating the whole central part of the lowland, dumping the soil on the south end which will enable us to have a larger lake and give us more planting space than we now have.” He added, “The Fairchild Garden is an assured success. I have been disappointed beyond measure in the lack of cooperation on the part of everybody in Washington. This is the only country in the world where a distinguished citizen like David Fairchild would receive so little consideration from the people with whom he worked a great many years...Some day when we have a notable collection of tropical plants, there may be belated recognition, but I for one will keep track of the lack of interest shown by the Department of Agriculture in Washington.”

By 1937, after two years at Beltsville, Fennell would write to Col. Montgomery that, “I am now more fully convinced than ever that there are only two things that I really like to do or know how to do well—grow palms and other tropical plants and grow orchids. I am therefore bending every effort to get back to Florida and into the work I love.” He would not make it back for another 13 years.

When World War II was on the horizon, the United States ramped up its efforts to develop rubber. “Dr. Fairchild and a number of others in the USDA had been trying since 1900 to develop a legitimate rubber program in this hemisphere,” Dudley says. “There was a leaf blight in Brazil that prevented them from growing the trees plantation-style.” Plantations had been established in Southeast Asia, but Germany and Japan had a large presence in the South Pacific, so the U.S. government could not count on those plantations. While the government searched for sources of the Para rubber tree, *Hevea brasiliensis*, the president of Haiti asked the U.S. for an agricultural advisor, as he was interested in coffee, cacao, sisal, bananas and timber. Fennell was sent to Haiti on the recommendations of Fairchild and Thomas Barbour, head of the Museum of Natural History at Harvard University.

Fennell gave up his USDA position to become president and general manager of the Societe Haitienne-Americaine de Developement Agricole (SHADA). Formed by the U.S. State Department and the Haitian government using funds loaned from the Export-Import Bank, the SHADA ultimately employed 77,000-plus people to grow rubber, sisal and Cryptostegia grandiflora, the Madagascar rubber vine that has a latex sap introduced by David Fairchild. After the Japanese conquered all the rubber plantations in Southeast Asia, the U.S. Congress passed the Emergency Rubber Production Act, which eventually lead to the development of synthetic rubber. The plug was pulled on the Haitian Cryptostegia plantations and ultimately Fennell resigned. His son Dudley, who has researched his father’s career, says that Haitian President Elie Lescot awarded Fennell the Haitian Order of Honor and Merit.

From Haiti, Fennell went to Puerto Rico at the request of the Puerto Rican governor, Rexford Tugwell, Dudley says. Through the Puerto Rican Agricultural Development Co., he worked to open the first supermarkets on the island, to improve the cattle, swine and poultry industries, and to supervise the planting of cayenne pineapple plantations. “He set up the pineapple industry in Puerto Rico,” says his grandson, Tom III.

By 1950, Fennell had left Puerto Rico and returned to Homestead to propagate and hybridize orchids at the Orchid Jungle, which he had purchased from his father. In 1955-56, he was granted a landscape architect’s license. “They allowed people who had been doing that kind of work to be grandfathered in,” Dudley said.

“He was very talkative, upbeat and positive,” says his grandson Tom III. “He was my mentor. I respected him a lot for all the things he had done. He looked at things in a practical way and was concerned about the way [business] affected people he worked with. He often told me, ‘I have a saying: Make it easy on the ox’ [treat your workers well].” Most significantly, Tom says, “He loved plants and horticulture.”
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Summer vegetables

By Georgia Tasker
We've all discovered that cherry tomatoes will keep right on producing fruit through summer, but there are many more summer survivors that can bring interesting tropical flavors and foods to your table, including calabaza squash, Malabar Spinach and yuca.

Photographer/gardener Ben Thacker says you can buy your summer garden from the produce section of many stores, but he particularly recommends Haitian or Latin markets. You can take inspiration from the garden at Troy Community Academy in Miami, where Thacker oversees the Gardens of Troy. Troy Academy is an alternative school for at-risk teens, ages 13 to 18, who have found themselves in the juvenile justice system or failed at traditional schools. Thacker began as a volunteer there two years ago, and now heads up the garden program, working at the school three days a week. He has taught the teens to grow fruits and vegetables, which they can take to the Roots in the City farmers market, held on Thursdays in Overtown, to sell. Thacker received a grant for the program from the Jim Moran Foundation, and he recently hosted 130 volunteers from City Year in Boston who spent a week building benches, an outdoor classroom, picnic tables and planters for the program.

To get the garden program started, Thacker received plants and seed donations. He gets mulch from Virginia Key’s City of Miami free mulch program. Adjacent to the vegetables is a native plant garden that attracts bees and other pollinators as well as “good” bugs that help keep down the bad bugs. He welcomed native plants from Fairchild Tropical Botanic Garden’s Connect to Protect Program and from Silent Native Nursery.

Working in small spaces around the school’s building, Thacker has helped students design keyhole gardens: A central space is filled with mulch and small raised beds are built around the unplanted areas. This allows easy access to lots of vegetables while the mulch breaks down and enriches the soil.

Take inspiration from Thacker and the Troy Academy students: His grocery store seeds and roots can be the basis of your summer garden. It can also produce sweet potatoes, okra, pineapples, shallots and more. Here is a rundown of delicious vegetables, fruits and tubers you can plant right now:

We live in a subtropical world, nestled between temperate and tropical climates. For that reason, we may select vegetables from both climates to produce our own food year-round. The winter’s broccoli and beets, the beans and lettuce may now be replaced with heat-loving vegetables from the tropics.
Calabaza is a squash that may have originated in Mexico or Peru, although it is sometimes called a West Indian pumpkin. Buy a wedge in the produce section, save the seeds and plant them. But give calabaza plenty of space: the vine may reach a height of 60 feet! It makes a great pie—just substitute it for pumpkin in any pumpkin pie recipe—and goes well in other squash dishes. Allow bee-attracting flowers and weeds to grow nearby so the calabaza’s flowers will be pollinated.

Malabar spinach used to be known as Ceylon spinach when there was a Ceylon. It’s a vine that likes to clamber over a trellis. Wait for the succulent leaves to grow to between two and four inches wide, then use them for salads or other spinach-like dishes. Don’t over-cook them or they’ll be gooey, like okra.

Yuca is a shrub from South America that produces edible tubers. Its botanical name is Manihot esculenta, and it’s sometimes called manioc or cassava. It is drought-tolerant, and a subsistence crop throughout the tropical world. It produces tapioca. These days, you can buy a tuber at Publix. Make yuca chips or cook with garlic.

Pineapple tops, which can be planted to grow new pineapples, are often discarded at stores, and you may be able to take a few with a store’s blessing. Dry the top for a couple of days and cut off the bottom leaves. Then, either plant this in a container of well-draining soil to let the top send out roots, or put it in the ground. Just inserting the top into a mound of mulch can work as well, Thacker says. These tops don’t like to be too wet, but they appreciate water. Fertilize every three or so months. It may take up to 18 months for the plant to produce fruit.

Sweet potatoes may be grown around the pineapples, Thacker says, or grow them on hills of loose soil. When shopping, look for sweet potatoes with eyes that may show signs of sprouting, or insert toothpicks into the sides of a potato, submerge the bottom in a glass of water and it will sprout. Plant the whole potato or use the shoots once they develop roots. Care is sometimes a matter of benign neglect with sweet potatoes, but if you want to fuss with them, water every three or four days if it doesn’t rain. Use a low-nitrogen fertilizer, such as 5-10-10. High nitrogen will produce leaves but no tubers. The Steele Plant Co. in Tennessee is one source of various colored sweet potatoes: sweetpotatoplant.com will get you there.

Boniato is a tropical sweet potato with white flesh that is grown much the same way as the orange or red-fleshed sweet potato. Boniato does not store well, and does not like to be refrigerated, so it is used soon after harvest. Weevils can be a pest to boniato and sweet potatoes, so if weevils should discover yours, destroy the vines and resolve to plant again in a different area in a year or two.

Okra is a heat-loving vegetable from Africa. Its name is said to come from Umbundu language of the Bantu people, who called it ngombo, or gumbo. It is used to thicken stews in New Orleans and other parts of the South, and replaced file as a thickener. (File was made of dried leaves of the sassafras tree.) Thacker likes to eat okra pods raw when they’re really small. If you allow them to grow longer than three or four inches, they will be tough. You can dry the pods (they become small works of art in brown and white) and save the seeds for the following year.

Ginger, Zingiber officinale, is an herb from tropical Asia that many of us grow for its ornamental value. The cream-colored flowers are small with red-lined lips. The rhizome, or underground stem, is the edible part of this plant. Ginger likes moist soils, but mulch will go a long way to providing the moisture it needs, and organic matter worked into the soil will help ginger thrive. It can grow in high shade. Buy a large piece of ginger that has white or greenish nodules or tips, advises Thacker. Break the piece into smaller parts and plant horizontally beneath the soil. The rhizome turns up in ginger snaps, ginger beer and lots of vegetarian and Asian dishes. Ginger candy is often used for motion sickness.
Black-eyed peas. Buy a bag and “just throw them down,” is Thacker’s advice. He likes to grow the peas on mounds around bananas. These legumes will add nitrogen to the soil while they’re growing. After you’ve harvested the peas, allow the plants to decompose so they’ll add even more nitrogen to the soil, and allow the roots to remain in the ground to conserve the soil’s microorganisms.

Hot peppers are great summer growers. Save seeds and plant them just beneath the soil. They like water, and prefer a little midday shade in summer. When handling hot peppers, do not rub your eyes!

Cuban or wide-leaf oregano has green fuzzy leaves that are edged in white or cream. This plant loves summer. I find it looks good in a planter or basket because it likes to spill over the sides. It will turn brown in cold weather, so grow it in a container and bring it inside. Sometimes called Mexican mint, it has square stems characteristic of the mint family.

Yard-long beans will grow up a fence or tall trellis. Yard-long beans may actually reach three feet in length, but you’ll want to harvest them when they reach 10 or 12 inches, says the USDA’s Natural Resources Conservation Service. These Asian beans come in red, lime-green, dark green or nondescript green. Light green pods are said to be more delicately flavored than the darker varieties. You’ll need a strong trellis and some string to help them climb. This is another crop that takes low-nitrogen fertilizer, such as 5-10-10.

Shallots are delicately flavored small bulbs, sometimes confused with scallions and leeks. Like other bulbs, they should be planted in a rich soil with the nose or pointy end up, just at or beneath the surface. Shallots don’t have a strong root system, so watch soil moisture carefully. These are “bunching” bulbs, which grow together in groups. If you plant them in early summer, harvest will be in the fall.

Papayas seemed to appear out of nowhere after Hurricane Andrew. They sprouted in natural areas with impunity. For your summer garden, simply buy one at the store, clean the seeds and plant them. There are male, female or bisexual plants, and hopefully you will get a bisexual if you want only one or two. However, if you plant several, they will flower when fairly small and you can determine which are male or female. The male flower will have lots of small flowers; females have larger flowers close to the trunk. Eliminate most of the males, as you only need one for several female plants to bear fruit.

Roselle or Florida cranberry is a hibiscus that adds a beautiful maroon color to your summer garden, and blooms in yellow flowers with red centers. Thacker has planted a row of these beauties along a high chain-link fence; they are growing tall against and through it. Each plant, which can be started from a cutting, can reach four to seven feet. Young, tender leaves are good for salads or tea.

Pigeon peas are widely grown in the tropics because they fix nitrogen in poor soil and produce several crops a year. Because they are drought-tolerant, you can grow them at the edges of your yard with non-irrigated plants. Pigeon peas may grow from five to eight feet tall, are about two feet wide and can last several years. If you find a market that carries pigeon peas in long pods, these are said to be sweeter than short-pod types. You can harvest them while the pod is green and use them as regular peas, or dry them on the plant and treat as a dried bean for soup or with rice. The plants start producing peas within three months. Pigeon peas, while often associated with Caribbean islands, probably originated in tropical Africa. The USDA says they were found in Egyptian tombs dating to 2,200 B.C.

The City of Miami offers its residents free mulch and compost at its Virginia Key location, 3851 Rickenbacker Causeway. It’s free of charge to City of Miami residents and can be picked up Monday through Friday from 8:30 a.m. to 3:00 p.m.
近期，我买了一本旧版的书，这是我多年来一直依赖的书，但是有一年在车库洪灾中丢失了。这就是《Common Sense Pest Control》由William Olkowski、Sheila Daar和Helga Olkowski合著。The Taunton Press在1991年出版了这本书。在Fairchild图书馆的礼品店有一本副本，值得拿出来花些时间阅读。

随着夏季来临，害虫增多，这本书可以指导你进行杂草、病害和害虫的控制和预防。它涉及室内植物、草坪、蔬菜园—你叫它什么。那里还有一个关于吸引有益昆虫的部分—带有温带的偏见，其中包括我们可以在南佛罗里达使用的植物，并在人工喂养的捕食性昆虫的帮助下保持蚜虫、鳞片和粉蚧的控制。《Common Sense Pest Control》甚至提供了一些建议，供佛罗里达南部的公寓和公寓居民使用，他们可能没有地菜园，甚至没有后院，但珍惜他们的房子和阳台植物。

学习阅读植物在你伸手拿化学喷雾之前正在告诉你什么，这将帮助你确定什么时候出问题。有时，植物的下部叶子会变黄并脱落。这通常不是由于害虫，而是由于浇太多水。确保容器底部有一个排水孔，不要让水留在托盘里。尝试给你的植物更多的阳光，不要害怕在土壤中插一根细针，看看它是否潮湿或干燥。棕色的叶尖通常表示施用了太多的肥料。换盆并使你的肥料变弱。如果你发现土壤上有一层白色的结皮，这可能是由于施肥过多或土壤在容器中蒸发，然后又通过根系蒸发回来。

如果新的叶子是苍白的，茎是软弱的，你的植物可能正处在补救阶段。这里有一个粗略的害虫症状和原因的总结，以及作者建议你如何解决它们：

**Symptom:** 新的生长被扭曲，叶子变小，卷曲，被绿色、黑色、棕色或黄色斑点覆盖。这就是害虫。这些吸食害虫喜欢幼嫩的新生长。杀虫剂的解决方案，或者非香精的洗碗皂和水，1½茶匙每加仑。

**Symptom:** 小白色昆虫会飞起来，当你刷过你的植物时。要赶走这些白飞，你可以使用杀虫剂的喷雾。不久，我在我的博客上写过有关使用卡斯蒂尔肥皂作为白飞控制对我的尖辣椒植物的控制。我买了一块Kirk’s Castile，并磨了一小块。然后我把它放在微波炉里融化，溶解了肥皂。一个理想的喷雾也可以用两汤匙的液体Dr. Bonner’s castile soap和一夸脱的水制成。（我试图用我的自制版本来接近这个。）卡斯蒂尔肥皂由橄榄油制成，但也可以包括荷荷巴、椰子和其他油。

**Symptom:** 在叶子的凹槽或叶脉上，棕色、黄色或白色斑点。这些是鳞片。使用杀虫剂的肥皂或轻质油喷雾来去除它们。

**Symptom:** 在叶腋或叶脉中，毛茸茸的白色棉花状的物质。粉蚧已经到达了。你可以把棉花棒浸在酒精中，然后清洁掉它们。

**Symptom:** 叶片上的斑点，造成一个银色的外观。这表示蜘蛛螨正在工作，从叶子下面吸走汁液。这些害虫每隔一段时间就会出现在我们干燥季节的户外植物上。一个相当的喷雾水下的叶子和叶腋会赶走它们，或者使用杀虫剂的肥皂，如Safer’s。

**Symptom:** 在叶子上，造成一个银色的外观。这表示蜘蛛螨正在工作，从叶子下面吸走汁液。这些害虫每隔一段时间就会出现在我们干燥季节的户外植物上。一个相当的喷雾水下的叶子和叶腋会赶走它们，或者使用杀虫剂的肥皂，如Safer’s。
The Guizhou geodorum is extremely rare and had not been seen by botanists in more than 80 years. All me inexperienced in the field of biodiversity conservation, if you wish, because I did and still do romanticize it. That’s why I chose this career and remain passionate about it. But there is no denying that conservation of plants, even charismatic orchids, is challenging. While some difficulties are shared across regions and species, others are unique and somewhat unexpected. This article is mostly about the latter.

Readers of The Tropical Garden may recall an article that I wrote in the Winter 2009 issue on my first journey to a wild orchid paradise, the Yachang Orchid Nature Preserve in southwestern China. I reported on the unusually large populations of many wild orchids. I also mentioned the excitement of the Chinese botanists about the discovery of a population of an attractive, fragile-looking ground orchid, the Guizhuo geodorum, *Geodorum eulophioides*. They had found it near the preserve a year before my initial visit. The Guizhou geodorum is extremely rare and had not been seen by botanists in more than 80 years. Unfortunately, not long after the joyful rediscovery came the bad news—the site that hosts the only known population of this rare orchid had been severely disturbed by human activities, including corn farming and the planting of exotic eucalyptus trees for paper pulp and timber. These orchids sustained direct physical damage when their underground bulbs were dug up or broken. Farming can also harm the orchid through herbicide and fertilizer use, which can disrupt the orchid’s life-dependent interactions with soil fungi. (You can read more about the farming disturbance of this species in the March 2010 issue of *Orchids* magazine).

I knew that in order to preserve this rare species, local officials would need to be convinced to stop the farming and erect a fence around the key area. I set out to make this happen. To start, I knew that I needed to gather together everyone from the local community who played a role in the conservation
of the Guizhou geodorum, including preserve managers, local government officials and farmers. But our first couple of meetings were unproductive, and I realized that the kind of discussion we needed to have was best held at a dinner table. I brought the parties together at dinner, where I drank shots of locally brewed rice wine to show my sincerity and respect for the local community. After that, a fence was erected and farming was stopped within the fenced area.

Once I had gained the trust of the preserve managers and local officials, and with the orchids receiving a healthy dose of international attention (through a high-profile article in Science Magazine), conserving this rare orchid should have been easy, right? Not so. Because of the disturbance resulting from farming, the orchid’s habitat desperately needs restoration to ensure the species’ long-term existence. As a restoration ecologist and advocate for the species’ conservation, I was given the responsibility to supervise this project.

I did not expect to proceed with this task with so little information. Ideally, I would carry out well-replicated restoration treatments completely, partially and not at all, or different combinations of treatments. These would include removal of exotic shrubs vs. leaving them in place, removal of eucalyptus trees (which now function as canopy trees to some extent) completely vs. partially or not at all. Based on the outcome for the orchid population with each treatment, I would recommend a definitive restoration procedure. However, the fenced area is so small, and the remaining number of orchids of concern is so low, that such elaborate ecological experiments are simply not possible.

Of course, it is not an option to take no action at all. Now that farmers are paid to give up their young eucalyptus trees and cornfields, keeping all the eucalyptus trees on site would send the wrong signal. Luckily, there are a couple of things we can do that will benefit the rare orchids right away. The abandoned field where the Guizhou geodorum grows was colonized by an exotic invasive species native to South Florida soon after farming stopped. The tall, dense, vigorously growing weed is choking the orchids. I can recommend the mechanical removal of the shrub during the orchid’s dormant season to give the orchids some breathing space.

In addition, there were a few large Yunnan thin-leaf pines, *Pinus yunnanensis* var. *tenuifolia*, on this site before farming. This variety of the Yunnan pine is endemic to the Hongshui River banks where the orchids grow. I can recommend planting pine seedlings from nearby sites to provide canopy cover and gradually replace the eucalyptus trees. Elimination of the eucalyptus trees all at once is not recommended because they function as canopy to provide some needed shade for the habitat.

Even with these recommendations, there are more questions than answers. For example, what is the right combination of vegetation for the habitat? What is the right range of soil pH for the orchid (and its fungal partners)? What is the end point of the restoration?

The responsibility of doing the restoration right is heavy. Not willing and able to bear the weight alone, I have enlisted colleagues, both Chinese and international, to join in planning the restoration. Scientific research, including experiments using seeds harvested from hand pollinations, is needed to further guide the restoration actions. I am hoping to report more good news in the next update.
What if you walked out of your back door and into paradise? What if you were surrounded by stately palms, delicious colors, extraordinary textures and striking shapes? Imagine your backyard as more than just a space—picture Eden without the apples. Creating your own slice of tropical heaven is an attainable goal in South Florida. Our unique location makes it possible to grow countless varieties of beautiful yet durable flora. It's a matter of following the principles of good horticulture combined with artistic design.

If your goal is to truly have a slice of tropical paradise, your yard will need to be both functional and beautiful. So before you decide to landscape, decide what you want out of your yard. Do you want a place to relax in the shade, hummingbirds and butterflies, delicious fruit, color, delicious aromas, exotic blooms, privacy or all of the above? By deciding what you want before you make your landscape plan, you will have a better idea of which plants can fulfill your desires.

LOT SIZE
The next part of planning is to think about the size of your lot. Postage-stamp-sized lots can still be successfully landscaped by removing most of the grass and replacing it with mulch, giving you a space to fill. Larger yards offer more freedom. Here, grass should be left in central areas and the perimeter of the yard and areas next to the house should be landscaped. By leaving the grass, you will create vistas that accentuate your design. If you have both front and back yards, the landscape design for each will be different in most cases. The front yard is what everyone in your neighborhood sees and what you will look at each time you come home. This design should be extremely visually appealing and have the design elements of color, texture and layers. The backyard design is just for you. Elements such as a picnic table, a hammock, an artistic bench or a water feature can be incorporated. Privacy can be created by mixing shrubs of different heights and textures along the property line.

COLOR
As you are working on your design, remember that color in the landscape is a very good thing, but too much is sometimes overpowering. All color, whether it comes from flowers or foliage, should be
balanced. The color green is the canvas in which the palette of reds, yellows and purples is painted. Never use large amounts of brightly colored plants without ample amounts of green to balance them out. Yellows go with purples and reds go with whites. Orange does well set against a backdrop of green. Try to use your colors in those combinations in different areas of your yard.

TEXTURE AND LAYERS
Good texture in your garden means having multiple leaf types and looks to your plants. Palms mixed with grasses, big tropical leaves set against grooved tree trunks or arrow-shaped leaves reaching towards the sky can give a yard the design element of texture. Layers are also important. Think of a forest. There is a canopy, then a shade–loving understory that contains many of the forest’s more interesting plants. This is a look you want to mimic in your backyard. The front of the house should be layered, but it is important not to use large palms such as the royal palm directly in front of a one-story house. The effect of the palm jutting out of the front of your home is not appealing to the eye. Layers in the home landscape also help during hurricanes, when larger, more durable trees such as oaks protect the more sensitive plants below.

THE RIGHT PLANT IN THE RIGHT LOCATION
Underlying all your plant choices is the need to put the right plant in the right location, which is paramount to making your landscape work. By choosing plants that do well in our harsh summers and poor soils, you will ensure that your landscape continues to thrive long after it is planted. To do so, first consider light levels, soil drainage and soil type in each location. Light levels are simpler to determine: Most of your yard will be full sun, but remember that right next to your house on the northern side you will have shade most of the day. Soil type and drainage has more variation. In most cases, your soil will have poor nutritional value and excellent drainage because it is primarily oolitic limestone (which is often incorrectly called coral rock). The limestone is high in pH, which may cause nutritional problems for plants such as hibiscus, ixoras and gardenias. For plants that will grow successfully in this type of soil, native plants are an excellent choice. They can be blended with non-natives that do well in our soils, such as many flowering trees, aroids and bromeliads.

When you put the right plant in the right location, you should need ultra-low amounts of irrigation and minimal fertilizer. This gives you a low-input yard that will pay you back in color, birds, butterflies, beauty, energy-saving shade and a tremendous increase in the value of your home.

For more information on gardening in South Florida, visit www.fairchildgarden.org/Gardening.
Fairchild has a wish list of items that will enhance our programs, but we need Wish Makers. We hope you see an item that you can help fulfill.

FOR THE HORTICULTURE TEAM
• LCD Projector, $1,000
• 12 Golf-cart Batteries, $1,200
• Walk-Behind Aerator, $1,500
• Software/Hardware for Accession Tag Embossing Machine, $2,600
• Plant Transport Van, $20,000

FOR CONSERVATION, RESEARCH AND THE ONLINE HERBARIUM
• Extra Tall Tripod, $150
• Macro Zoom Lens for SLR Sony Camera, $800
• Laptop Computer, $2,000
• New Display Giclee Prints on Canvas for Public Events, $2,000
• Ultra-Cold Freezer (DNA Bank), $6,000
• Plant Canopy Imager, $6,000
• Seed Germination Chamber, $8,500
• Mid-Size Pick-up Truck, $26,400

FOR THE RESEARCH LIBRARY
• New Computer, $1,200
• Large-Format Scanner, $2,600

FOR THE FAIRCHILD FARM
• Pottery Wheels (3) for Ceramic Classes, $1,000 each

FOR THE MARKETING AND COMMUNICATIONS TEAM
• Nikon Digital 22-24 mm Super Wide Angle Lens, $900

FOR SPECIAL EVENTS
• Energy Efficient Washer/Dryer, $1,500
• Fully-equipped Commercial Kitchen for Visitor Center

FOR MEMBER AND DONOR SERVICES
• Laptop Computer/LCD Projector, $2,000
• Digital SLR Camera, $1,000

FOR EDUCATION PROGRAMS
• Laptop Computer/LCD Projector, $2,000
• SMART Board, $2,000
• Solar Conversion Kit, $2,000
• Canon Double-sided Feeder Scanner, $3,000
• Art Supplies, TBA
• Production of a Fairchild Challenge Documentary (In-kind or Underwriting)
• Recording studio time (In-kind or Underwriting)

FOR THE VOLUNTEER DEPARTMENT
• Digital SLR Camera, $1,000

To fully fund a wish, donate a portion of the cost or donate the actual item, please contact Leslie Quintero at 305.663.8051, lquintero@fairchildgarden.org or Jan Brown at 305.667.1651, ext. 3373, jbrown@fairchildgarden.org.

To fulfill a wish online, please visit www.fairchildgarden.org/Donate
The following gifts were made between November 1, 2010 and February 28, 2011. Please notify the Donor Relations Office at 305.667.1651, ext. 3373 if your information is incorrect. We apologize in advance for any errors or omissions.

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In Memory of Craig Koller
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(on behalf of family & friends)
Tribute Trees
In Memory of Andres Chong
Ms. Virginia Chong & Family
In Memory of Barbara Foote Fales
Ms. Sandra F. Hillman
In Memory of Lucila Iglesias Morell
Ms. Anna M. Janoura
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To support Fairchild, please visit www.fairchildgarden.org/Donate

www.fairchildgarden.org | 53
The annual Gala in the Garden took place on February 5 under a beautiful tropical night sky. The event, Fairchild’s largest fundraiser, drew hundreds of Miami’s business, political, social and philanthropic leaders. Guests enjoyed a delicious dinner and festive dancing under an orchid chandelier that was simply breathtaking. The event also featured the garden’s highly regarded silent auction, in which hundreds of items were available for purchase. The entire evening was very successful for Fairchild. The funds raised are used for the garden’s programs in conservation science, education and horticulture.
t was a magical night in the garden for the 17th Annual Holiday Music Concert, co-chaired by Diane Davis and Susan Feldman. Guests were treated to a splendid champagne dinner under the stars, provided by Macy’s Catering. The evening’s program was conducted by Robert Heath, and included Johann Sebastian Bach’s “Allegro,” “The Twelve Days of Christmas” and “Silent Night.” This delightful evening would not have been possible without the support of White & Case and Baptist Health South Florida. Don’t miss our next Holiday Music Concert on Sunday, December 4, 2011.

1. Susan Feldman and Diane Davis (Co-chairs)
2. Fairchild Chamber Soloists under the direction of Robert Heath, Artistic Director
3. Susanne and Carl Lewis, Susan and Jeff Feldman (Co-chair), Diane and John Davis (Co-chair),
   Robert Heath (Artistic Director)
4. Trudy Faust, Harpist
Thanks to the 200 outstanding young professionals who joined us in Fairchild’s ballroom for the amazing event Fine Wines | Upscale Ales. Wine flowed, beer foamed over and delicious food was enjoyed late into the night along with the music of Griffin Anthony. Through this event, the Fairchild Palms young professionals group raised thousands of dollars for The Fairchild Challenge. The Challenge works to foster interest in the environment for students across Florida, the United States and the globe.

For more information on The Palms, the garden’s young professionals conservation group, please visit us at www.FairchildPalms.org.

Stunning ORCHIDS, exquisite gifts, lush tropical gardens and more, all in the heart of the Redland.

Open
Tuesday-Sunday, 9am to 5pm
(closed Monday)

Join us on select Friday evenings in May and enjoy great movies! Arrive early and go on a sunset tram tour or take a stroll of the Garden. It’s perfect for family movie night, date night or an evening out with friends.

Gates open at 7:00 p.m. Movie starts at 8:00 p.m.

The Lakeside Café will be open and offering delicious picnic options, or bring your own picnic!

Admission: $10 for Members, $15 for Non-members, $8 for Member children, $10 Non-member children and free for children 5 and under.

For more information on The Palms, the garden’s young professionals conservation group, please visit us at www.FairchildPalms.org.

Fine Wines, Upscale Ales—A Great Event for a Worthy Cause

Photos by Andrew Quarrie, SilverPulp
Fairchild is pleased to present Plants and People: An Interactive Garden, unearthing a World of Experiences for People Living with Alzheimer’s.

This program is free of charge. Early registration is encouraged as there is limited seating.

Join us on:
- Monday, May 2
- Monday, May 16

For more information, please call 305.667.1651, ext. 3388.
24/7 Alzheimer’s helpline: **1.800.272.3900**.

Support is generously provided by Lin Lougheed, the Aaron I. Fleishman Foundation and the Alzheimer’s Association.

Step into a **paradise** of tranquility, beauty and the embracing comfort of a secret garden.
Gardening with Children
By Erin Fitts

Gardening is a great way for children to creatively interact with nature. The Shop at Fairchild can help you get started with this fun activity that can lead children to a lifelong appreciation of nature.

A CHILD’S GARDEN
By Molly Dannenmaier, $19.95.
Explore 60 creative ways to integrate play areas into home gardens and landscapes. Some of the delightful ideas include building a garden tree house and making child-friendly fountains and ponds, as well as planting to attract wildlife.

KIDS’ CONTAINER GARDENING
By Cindy Krezel, $14.95.
Using containers is a fun way to introduce gardening to children. This book is full of creative projects, from Halloween hats to garden aquariums.

GARDENING WITH KIDS
By Georgia Tasker, $9.95.
Fairchild writer Georgia Tasker tells you how to get your kids growing their own food in a sustainable vegetable garden. This handbook covers the history of many foods and offers suggestions for numerous different kinds of gardens that will capture young imaginations.

SHARING GARDENS
$12.95-$24.95.
The Shop at Fairchild carries many gardening kits that are great for children, including the Sharing Garden series. Based on familiar children’s stories, these kits come with seeds, directions, a garden plan and references to the books they are based on.

What we are doing:
• Recycling all paper, plastic bottles and aluminum cans
• Using 100% biodegradable plates and flatware
• Using 100% recycled napkins
• Using biodegradable cleaning products.
• Using plant waste to create mulch used in plant beds

During your visit:
During your visits to Fairchild you can help us in our recycling mission by:
• Placing empty bottles and cans in the blue recycling bins
• If possible, return your program at the points of entrance

Sign up today for The Shop at Fairchild’s frequent shopper program! After you make six merchandise purchases, we’ll add them all up and give you 10% of your total in reward dollars to spend in the store.
INTERNATIONAL CHOCOLATE FESTIVAL

Everyone’s favorite festival reached new heights in 2011, breaking attendance records as more than 14,000 people came to Fairchild for sweet eats and yummy treats! Visitors enjoyed lectures, cooking demonstrations, a ChocoWalk through the rainforest, kids’ activities focused on Fair Trade, local food trucks and, of course, a Garden House filled with delicious and delectable chocolate from renowned local, national and international chocolatiers. While the ChocoSpa, featuring massages and mani/pedis, was a particularly “sweet” spot to be, crowds also gathered around the music tent, grooving to Music of the Chocolate Lands. Stay tuned as we reveal exciting news for Chocolate Festival 2012, sure to be more scrumptious than ever before!

INTERNATIONAL ORCHID FESTIVAL

More than 9,000 visitors experienced the world’s most coveted plant in all its forms, colors, fragrances and splendor at Fairchild’s 9th Annual International Orchid Festival, which was held March 11, 12 and 13, 2011. Those looking to bring an orchid home could choose from more than 10,000 plants from more than 50 vendors. Informative workshops and lectures and Orchid walking tours offered plenty of educational opportunities. And, in celebration of this plant, the Garden featured an “Orchid Tea Room” offering tea and dessert, botanic yoga classes, and OrKids activities including art projects, trivia games and storytelling, courtesy of the Miami-Dade Public Library system. Visitors young and old enjoyed food, fun, flora and fauna during one of Fairchild’s most beloved festivals.
SUNDAY SOUNDS AT FAIRCHILD
The trend of new and exciting happenings at Fairchild continued, with January 2011 bringing the inaugural Sunday Sounds at Fairchild event. Every Sunday from January through April, Fairchild hosted concerts by musicians from the University of Miami’s Frost School of Music, with each concert featuring a different student ensemble. Our visitors enthusiastically supported these events, arriving with picnic blankets and lounge chairs to enjoy the fantastic music set against Fairchild’s stunning background.

NEW LAKESIDE CAFÉ
As construction commenced on the much-anticipated Science Village complex at Fairchild, it meant a temporary relocation for our award-winning Café. Visitors can now enjoy the new Lakeside Café, located on the shore of serene Pandanus Lake, directly to the left of Tram Plaza. The Lakeside Café is still serving all of your favorite salads, sandwiches, wraps and snacks in this new, gorgeous setting. Dine while the calm Canard Sur L’eau sculpture floats by on the lake (part of our current art exhibition, Les Lalanne at Fairchild) and stay connected using the Café’s complimentary WiFi.

VALENTINE’S DAY CONCERT
More than 800 visitors experienced the most romantic night of the year at Fairchild, celebrating Valentine’s Day with a concert under the stars. This year’s annual Valentine’s Day concert featured the sultry sounds of jazz singers Kevin Mahogany and Kathy Kosins as they performed with the University of Miami’s premiere large ensemble, the Frost Concert Jazz Band, led by Dante Luciani. Guests spread out on the Garden House lawn, where they enjoyed picnics, wine, beautiful weather and spectacular music. Presented by Rudy and Jeanne Aragon, White & Case law firm and Baptist Health South Florida, the evening was a huge success, with couples swaying to the beat amongst the most beautiful scenery in Miami. It’s no wonder the Garden was recently rated one of the “Top 10 Most Romantic Destinations in Miami” by CupidRatings.com!

YOKO ONO’S WISHING GROVE
Another world-renowned artist has joined the lineup of the Art at Fairchild program. Yoko Ono, a multi-media artist who constantly challenges the traditional boundaries of art, is known for her groundbreaking conceptual and performance pieces, experimental films and music. Fairchild is proud to host Ono’s latest exhibit, the interactive Wishing Grove, where visitors have the chance to take a paper tag, write their wish on it, and send their wish into the world by hanging it from a ficus tree in Fairchild’s beautiful Arboretum. When the exhibit ends, all of the collected wishes will be placed in Ono’s Imagine Peace Tower in Iceland. Don’t miss the chance to make a wish!
YOUTH COMMUNICATING AND NETWORKING CONFERENCE AT FAIRCHILD

On February 17, more than 120 students from 7 local schools participated in a YouthCaN (Youth Communicating and Networking) conference at the Garden as part of the Fairchild Challenge for Elementary Schools. Students in first through fifth grades presented environmentally themed projects to an audience of their peers. Everyone was inspired by ideas including demonstrations of botanical illustration, how to make solar cooker ovens and how to save water using rain barrels. YouthCaN is an international youth-run organization that uses technology to inspire, connect and educate people about environmental issues, as well as to unite and empower youth to make a difference in their communities. For more information, visit www.fairchildchallenge.org or www.youthcanworld.org.

CLEOPATRA: A LIFE

Fairchild’s partnership with Books & Books continues to be popular with both members and local reading enthusiasts. On February 23, 2011, we welcomed author Stacy Schiff, who gave the audience a fascinating lecture on her latest work, Cleopatra: A Life. This work is a luminous, deeply original reconstruction of the Egyptian queen’s dazzling life. In addition to her lecture, Schiff conducted an excerpted reading and book signing. Guests also enjoyed a wine and cheese reception, as well as a sampling of treats from local bakery Ginny Bakes. Be the first to get the details on our upcoming author events with Books & Books by visiting our website, www.fairchildgarden.org/Events.

THE FAIRCHILD FARM

Stop by and try our deliciously fresh and locally grown fruit smoothies and buy tropical fruit from Fairchild’s collection.

Saturday and Sunday
9:00 a.m. to 3:30 p.m. Year-round
NEW TRAMS, BUILDING ANNOUNCED AT MEMBERS’ MEETING

The 2011 Annual Members’ Meeting was a wonderful look back on the year at Fairchild. Dr. Richard J. Campbell, director of horticulture, delivered the keynote speech, speaking on the legacy of Dr. David Fairchild and how the garden’s research, horticulture and educational teams are continuing in the footsteps of the garden’s namesake. Board of Trustees President Bruce Greer also excited the many members, volunteers and staff in attendance with his vision of the garden’s future and news of the purchase of two new trams in honor of Don Blechman. Purchase of the state-of-the-art-trams is made possible by the generosity of Patti and Allan Herbert, Terry Blechman and the hundreds of Fairchild members and supporters who donated to this worthy cause. Bruce also unveiled plans for the new Adam R. Rose and Peter R. McQuillan Center, which will be used as an art gallery, chamber hall and central gathering place, and will sit alongside the Jean-Ellen Shehan Visitor Center. We thank Adam and Peter for their incredible gift to Fairchild, and look forward to an exciting year of developments at the garden.

GOT STORAGE?

Work and storage space is needed for The Ramble Antiques and Collectibles and the Old and Rare Books Committees. If you have an empty cottage, storefront, or office space for the garden to use from now until November, please contact Natalie Bernal at 305.667.1651, ext. 3391. To donate items of age, distinction or beauty to The Ramble’s Antiques & Collectibles Sale, call Dorothy Errera at 305.666.3010. Donated items may include art, jewelry, linens, silver, china, crystal and ceramics. To donate good quality used and rare books and other media for the Old & Rare Books booth, call Stuart Debenham at 305.665.8572 or email wdebenham@msn.com.

STAFF NEWS

Photos by Gaby Orihuela/FTBG and Jeff Wasielewski/FTBG

NATALIE WHITE is the new director of community relations and event planning and comes to us from Whole Foods Market, where she was the marketing team leader. Natalie has been influential in creating the ongoing partnership between Fairchild and Whole Foods Market and came to Fairchild with a broad knowledge of the garden. She is a graduate of Florida State University with degrees in Art History and Museum Studies.

BRETT JESTROW PH.D., is the new Herbarium curator. He had the good fortune of pursuing his botanical interests through the dual Ph.D. program at Fairchild and Florida International University. Brett’s research involved collecting throughout the Caribbean alongside multiple collaborators, combined with intensive work in the molecular laboratory here at Fairchild. Most recently, Brett’s research resulted in the description of the genus Garciadelia.

TIFFANY LUM is Fairchild’s new nursery horticulturist. She began working with plants as a landscape gardener in New York and has been with the garden for the past nine months as part of a joint horticultural internship with Gemini Botanic Gardens in Manalapan. Tiffany is also pursuing a degree in horticulture from Miami Dade College. She is thrilled to continue on as part of the Fairchild team.

MICAH MILNER is a graphic designer at Fairchild. Originally from Lakeland, Fla., he has made his home in Miami for the past six years. A recent graduate from New World School of the Arts, he is thrilled to be working at Fairchild and doing what he loves.
Approximately 25 years ago, Bert Zuckerman, a Fairchild volunteer historian, made a list of 2,764 of Dr. David Fairchild’s images. This was just a tiny part of what is housed in Fairchild’s archive, but it was a start. He enlisted the help of Mike Kambour, a photographer, cycad enthusiast and Fairchild volunteer. Mike reproduced approximately 1,000 photos from the negatives or prints included in Bert’s list. The list and the photos were the genesis of an ongoing project to index and scan all of Dr. Fairchild’s images.

Eight years ago, when Nancy Korber, Fairchild’s librarian/archivist, first arrived at the Garden, she set upon the herculean task of properly cataloging these images according to archival standards. She and a small group of dedicated volunteers began indexing Mike’s photos. With the later addition of a scanner, they were able to process the already indexed images. They then began indexing and scanning all of Dr. Fairchild’s images. Nancy does not yet know the exact number in the collection, although she estimates it to be in the neighborhood of 20,000. There are boxes and boxes of lantern slides, negatives and photos along with scrapbooks and miscellaneous images stored in file cabinets.

Among Dr. Fairchild’s many talents was that of organization and meticulous record keeping. For all of his working life, he kept small red pocket notebooks. On the first page he always wrote his name, address and the start and end date. There are 478 pocket notebooks in the archive, dating from 1892 to 1953. Wherever he went, he took photos and made notes in his notebooks. Each page in the notebook has a number on it, which corresponds to a number on a negative. There are also numbers that refer to pages in his scrapbooks and numbers which are tracking numbers for the USDA Section of Plant Introduction. It is necessary to be constantly cross-referencing these numbers to ensure all the information available for each particular image is recorded. By now, Nancy and her volunteers have become familiar with the sequencing and can work relatively quickly.

The results of Dr. Fairchild’s system, which he encouraged other explorers to use, make it possible to match each image with the information he recorded. As of this printing,

1. A page from Dr. Fairchild’s scrapbook of his 1926 trip to the Canary Islands.

2. Dr. Fairchild’s photo #14787. The number corresponds to page 14787 in a pocket notebook which reads, “The Old Dragon Tree at Icod de los Viños, Tenerife, Drachena draco [sic]. Possibly more than a thousand years old. Compare with palm to judge size.” These are the trees Francisco-Ortega identified as still being in existence.
Dr. Javier Francisco-Ortega’s appointment as a member of the Instituto de Estudios Canarios (IEC) led to the decision to focus the photo scanning project on images of Dr. David Fairchild’s trips to the Canary Islands. The IEC is the Canaries’ oldest research organization, and Francisco Ortega’s appointment began in December 2010. For Francisco-Ortega, Fairchild Challenge program manager, head of the FIU/Fairchild Plant Molecular Systematics Laboratory and a native of the Canaries, this is a great honor that recognizes the value of his life’s work to-date.

Upon receiving news of the appointment, he decided to focus his acceptance talk on Dr. Fairchild’s trips to the islands. He contacted Nancy Korber, librarian/archivist at Fairchild, to see if there were a few images he could use and maybe some information on the trips. He was surprised and pleased to learn that, because of the ongoing scanning project, there were already approximately 200 images from those trips available. Nancy showed him the images and he was able to recognize the locations of many of the photos. There is even a 1926 photo of an ancient Dracaena draco, Canary Islands dragon tree, standing next to a Phoenix canariensis, Canary Island date palm, which, according to Dr. Francisco-Ortega, still exist. (See photo on page 64.)

Dr. Fairchild visited the Canary Islands once with Barbour Lathrop in 1902 and three times during the Allison V. Armour expeditions aboard the Utowana. “David Fairchild’s images of the Canary Islands are unique not only because of their botanical importance but because they provide a unique perspective of the daily life of the countryside of the Canary Islands in the early 20th Century,” Francisco-Ortega says. “No other early plant explorer who visited the Canaries provided such a valuable photographic record of our horticultural systems, landscapes, villages and the way of life of the people of the Canaries as David Fairchild.”

When all these images are indexed and scanned, Fairchild will have an incredible pictorial and written record of the Canary Islands’ botanic and cultural history in the early 20th Century. For future scientists and researchers, this will prove to be quite a treasure trove of information.
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