Dear Friends,

Despite challenging times, we finished 2020 very strongly. Perhaps Voltaire said it best? “Il faut cultiver son jardin” (you must cultivate your garden). Keeping our focus right there moved us ahead: Montgomery’s verdant beauty and feel – trunks, foliage, vistas and views – lighted our way forward.

Our pathway has never been so smooth! Pages 6 and 7 describe a major upgrade to our garden, a carefully designed road system linking our lowlands and lakes in a graceful sweep. Walter Haynes deserves our thanks not only for that gift, but also for his fifty years of leadership and generosity.

I am happy to share Professor Christine Bacon’s recent expedition in search of a remote Amazonian palm (pages 4 and 5). Montgomery’s Plant Exploration Fund continues to foster these amazing collaborations. Christine’s detailed approach to these fascinating botanical questions will lead to further discoveries – and research here at Montgomery also continues to advance (page 8).

All of these successes illustrate how great people carry us forward. And we are fortunate to have so many of you on our team! Your efforts, generosity, and enthusiasm – evident on pages 9, 10 and 11 – make all of this possible. Thank you for all of your help!

Pictured: Dr. Griffith with the largest banyan at Montgomery. This species (*Ficus altissima*) is often called the Council Tree, as large groups can gather in its ample shade. On the Cover: This aerial view of our Lowland Palmetum shows the new roads weaving through the palm collection – see pages 6 and 7 for details. Montgomery currently grows 422 different kinds of palms! Page 8 provides details on our diverse collection.
Montgomery hosts a new effort to network cycads around the world – the Global Conservation Consortium for Cycads (GCCC). Funded by a 3-year National Leadership Grant to the Morton Arboretum, this project will link botanic gardens with important living cycads into a ‘metacollection’ that supports global conservation work.

This project is a continuation of Montgomery’s work to study how gardens working together capture more diversity than any single garden – please see our Spring 2020 Newsletter. The current project will implement networks based on that metacollection idea, ensuring that no cycad species will go extinct.

The Cycad Consortium joins other Consortia for magnolias, rhododendrons, oaks, and maples, under a program of Botanic Gardens Conservation International. Montgomery is well suited for this leadership role in cycads, given that the Global Programme Office for the Cycad Specialist Group is also based here.

Dr. Vanessa Handley, GCCC Project Leader, adds, “Despite our increased emphasis on conservation, recent years have borne witness to an ongoing decline in cycad populations. This paradox speaks to the complexity of the issues and highlights the need for greatly accelerated action.”

Dr. Patrick Griffith, who also serves as co-chair of the Cycad Specialist Group, states: “The consortium for cycads comes at a perfect time when our understanding of genetic conservation is increasing rapidly, enthusiasm to network plants across gardens is strong, and cycads are more imperiled than before. It is great to see gardens adopting such a collaborative approach!”

We thank the Institute of Museum and Library Services for funding this important project (Grant # MG-245375-OMS-20).

This project also studies the genetic conservation of Zamia integrifolia, the only US Native cycad. This species was nearly wiped out for starch extraction in the 19th and 20th centuries.

Dr. Vanessa Handley (see page 9) with Encephalartos lanatus in South Africa. Many species of Encephalartos are highly threatened, with some extinct except for those growing in botanic gardens. Dr. Handley’s research centers on how such plants in cultivation can support long-term conservation.
The sun sets early in the tropics, and even earlier under the dense, diverse forest of Amazonia. With so little time left in the day, we quickened our pace in pursuit of a very rare palm. Our local Bora guide had seen what we sought near El Zafire. But it was our last day together as a team, and we still hadn’t found it...

Months earlier in the dark Swedish winter, we planned and prepared this expedition – a scientific endeavor to study a remote palm, Geonoma macrostachys variety acaulis. Data from this palm could illuminate the process of plant speciation, as these palms seem to be separating at this very time. We arranged schedules, hired guides and a cinematographer, and together formulated a plan.

Later in Colombia we rode overloaded trucks down the sole regional road to meet our guides. Now 18 strong, we backpacked two weeks of supplies, equipment, and materials eight hours deep into the Colombian Amazon to the Brazilian border. For two weeks we collected hundreds of plant samples, soil samples, and seeds, recorded hours of film, took hundreds of photos, strengthened our international collaborations with Colombian, Bora, and Uitoto partners – and made unforgettable memories.
Experts from the Bora, Uitoto, and Miraña communities invited us to discuss threats to their forest home. We shared our palm study – and they too noted how leaves and stems vary depending on where a palm grows. These local leaders highlighted how bringing scientific and traditional knowledge together can better preserve this forest and its palms. We realized their knowledge is of exceptional value, as they have known this forest for much longer than anyone.

And as dusk fell on the forest on that last day, we finally came upon our first Geonoma macrostachys variety acaulis, with shiny leaflets and fruits gleaming in the final rays. Like the seeds we sow in botanic gardens, we will continue to foster these collaborations, and connect with the broader community through our outreach. We look to see both palm seedlings and new researchers growing in the future.

Contact: christinedbacon@gmail.com

While documenting over 40 palm species, we found this petite, blue-fruited Geonoma stricta, also highly variable in leaf shape. The species is widespread across the Amazon region and beyond.

This maloca made of Lepidocaryum tenue (caraná) palms was our home base in Zafire. The traditional maloca is considered the center of the universe by indigenous communities of the region.

Ana Ospina, Christine D. Bacon, and Sara Carvalho on the border between Colombia and Brazil, a few kilometers from Zafire.

ACKNOWLEDGEMENTS

We thank the Zafire Biological Station and collaboration with Universidad la CES for permission to collect. This work was generously supported by the Plant Exploration Fund of Montgomery Botanical Center, the International Palm Society, the Biodiversity and Ecosystem Services in a Changing Climate Strategic Research Area (BECC) at the University of Gothenburg, and the Swedish Research Council. Photos: María Fernanda Torres Jiménez, María José Sanín, Michael Calonje, and Tatiana Vila – Endemica Studios.
Montgomery dedicated its roads as the Walter Haynes Garden Ways. Our Board of Directors wished to recognize Walter for his lifelong service to Montgomery and his very generous gifts to improve the infrastructure here.

Walter has served tirelessly on Montgomery’s Board since 1970 – five full decades of leadership, guidance and support through many big changes. His vision for the landscape and mission laid a clear path to the successful, beautiful garden we now enjoy. He expresses his motivation for his very generous donations: “Good landscape design for our scientific plant collections is an important goal for Montgomery. Our roads provide a way to travel through the collections. The design of the roads attracts the vision to the collections and helps frame them while the smooth curves of the roads provide a feeling of serenity.”

Walter’s most recent gift allows a full circuit of the landsite – one and a half miles – around the lakes. A capstone of his infrastructure gifts spanning both the last decade and all 120 acres, these roads now allow all-weather access to the lowland palmetum and lakes – providing essential views and vistas for every visitor.

Walter always shows us the way forward at Montgomery – and we are glad to honor his work!
Joe Hibbard, our Landscape Architect and Honorary Member, provided guidance and design for these projects. He states:

“The garden roads are an important functional and visual part of the Montgomery Botanical Center landscape. The roads are the principal vantage point from which we all gain our experience of moving through this special landscape. The system includes the historic roads such as the original Old Cutler Road and the Royal Palm Colonnade that date back to Colonel Montgomery’s original property plan. The garden roads reflect the practical considerations of providing efficient access to the collections, but their form is also purposefully expressive to bring pleasure and calmness of mind to those who travel them.

Since the mid-1990s the expansion and renewal of the garden road system has proceeded hand in hand with the rapid growth of the Living Collections. During this time, no person has done more to guide, support and extend the tradition of sensitive design of the property’s garden roads than Walter Haynes.”
A group of biologists from Zurich, Cornell, and Montgomery studied the challenges of conserving both rare *Zamia* and the rare butterflies that feed on them. Atala butterflies are a rare and cherished species, and Montgomery has the largest concentration of these beauties in Florida – because we grow their food so abundantly. The study is featured on the cover of the *Florida Entomologist*.

A Doctoral Student from Cornell, Ayress Grinage (left), studied our *Sabal* collections, making a large number of specimens. Her review of our plants highlighted some interesting novelties not yet noticed – such as how the elusive “Miami Palmetto” (*Sabal miamiensis*) might be more widespread than previously thought. Here, she works with Jessica Sparks (right), MBC Seedbank Coordinator, in the Chris Tyson Plant Conservation Building.

The *Proceedings of Cycad 2015*, containing 7 chapters and the Medellin Declaration for Cycad Conservation is now available as a free, online resource (please see cycadgroup.org). This book documents the advances highlighted at the Tenth International Conference on Cycad Biology. Montgomery was deeply involved in that gathering and the production of this important book. A limited number of hardcover copies are also available.

Space limits what we can highlight here – please visit our website for a full view of our work in botany, horticulture, and conservation. www.montgomerybotanical.org

### Montgomery Botanical Center 2020 Collection Inventory

<table>
<thead>
<tr>
<th></th>
<th>Palms</th>
<th>Cycads</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Taxa</strong></td>
<td>422</td>
<td>261</td>
<td>512</td>
</tr>
<tr>
<td>in ground</td>
<td>386</td>
<td>236</td>
<td>502</td>
</tr>
<tr>
<td>in nursery</td>
<td>107</td>
<td>86</td>
<td>15</td>
</tr>
<tr>
<td><strong>Total Accessions</strong></td>
<td>2,238</td>
<td>1,879</td>
<td>1,929</td>
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<tr>
<td>in ground</td>
<td>1,975</td>
<td>1,681</td>
<td>1,918</td>
</tr>
<tr>
<td>in nursery</td>
<td>316</td>
<td>270</td>
<td>16</td>
</tr>
<tr>
<td><strong>Total Plants</strong></td>
<td>9,066</td>
<td>7,032</td>
<td>2,316</td>
</tr>
<tr>
<td>in ground</td>
<td>6,652</td>
<td>5,563</td>
<td>2,276</td>
</tr>
<tr>
<td>in nursery</td>
<td>2,414</td>
<td>1,469</td>
<td>40</td>
</tr>
</tbody>
</table>

**18,414 Plants!**
Thank You to Our 2020 Volunteers

Aleman, Priscilla
Barrera, Maria
Bauders, Max
Booth, Blaise
Booth, Brian
Booth, Conrad
Brusberg, Marian
Cahill-Booth, Lara
Chavez, Christina
Chebli, Emily
Cold, Marsha
Crow, Alex
Danielson, Laurie
English, Ed
English, Janet
Gailey, Anna
Galetti, Leo
Griffith, Bella
Griffith, Clara
Gulliver Academy
Hicks, Trish
Jacobson, Kay
Jordan, Vivian
Kay, Judy
Kraus, Mark
Leverett, Lynn
Martin, Margaret
Martinez, Marcie
MBC Board of Directors (page 2)
Morales, Jessica
Morgan, Cody
Nghiem-Phu, Lan
Noblick, Daniela
Palmetto High,
Dr. Edelman Class
Park, Lane
Piriyakul, Jorge
Richardson, Maggie
Sacher, Charles P.
St. Philips Episcopal 2nd graders
Street, Jensen
Street, Michael
Wilson, Michael Glenn
GRANT FOR NELL’S HOUSE RESTORATION
Kelly Foundation

GRANT FOR FELLOWSHIP IN CONSERVATION HORTICULTURE
Batchelor Foundation

IN SUPPORT OF THE PLANT EXPLORATION FUND
Faith Bishock/Fessenden Family Fund
Ellen Gall & Joe Penchansky
Gregory Hood
Dale Kammerlohr
Nancy Lee & Jonathan Kemper
Lin Lougheed
Peter Mayotte
Lelan Nishek
Steve Pearson
Lazarro Priegues
Charles P. Sacher
Sam Schmerler
Judy Shaw
Shaw’s Home Maintenance & Landscape

IN SUPPORT OF THE LANDSCAPE DESIGN FUND
Walter Haynes
Terry Beaty / Beaty Family Fund
Stephen & Laurie Anderson
Lelan Nishek
Jill Stone & Tone Calle

IN SUPPORT OF THE PETER R. & STUART Y. JENNINGS INTERNSHIP FUND
Marian Brusberg

IN SUPPORT OF HAMMOCK RESTORATION
Karl & Charlotte Smiley

IN SUPPORT OF THE ROADS UPGRADE
Walter Haynes

IN SUPPORT OF THE PALM RESEARCH IN MEXICO
Tim Gregory

IN SUPPORT OF CYCAD CONSERVATION IN COLOMBIA
Tim Gregory

IN SUPPORT OF CYCAD CONSERVATION IN ZIMBABWE
Tim Gregory

IN SUPPORT OF GENETIC RESEARCH
Institute of Museum & Library Services, via Chicago Botanic Garden

GRANT FOR COVID-19 RELIEF
Stanley Smith Horticultural Trust

GRANT FOR CYCAD BED RECONFIGURATION
Stanley Smith Horticultural Trust

GRANT FOR STUDIO RESTORATION
The Villagers

GRANT FOR 1932 GREENHOUSE RESTORATION
The Villagers

GRANT FOR PLANT RESEARCH IN HAITI
Global Botanic Garden Fund
BGCI

GRANT FOR CULTURAL DEVELOPMENT
City of Coral Gables

GRANTS IN SUPPORT OF OUR WORK
Central Florida Palm & Cycad Society
Coconut Grove Garden Club

IN HONOR OF WALTER HAYNES
Beaty Family Fund

IN HONOR OF MARGARET MEISTER & TIAGO GARCIA
Patrick & Tonya Griffith

IN HONOR OF CHARLES P. SACHER’S RETIREMENT
Pamela Poulos
Martha Rogers Haas

IN HONOR OF CHARLES P. SACHER ON HIS BIRTHDAY
Pamela Poulos
Martha Rogers Haas

IN HONOR OF SAN DIEGO BOTANIC GARDEN’S COMMITMENT TO CYCAD CONSERVATION
Kopfstein, Robert

IN SUPPORT OF THE NURSERY
Lane Park & F. Lynn Leverett
Margaret & Serge Martin
Patricia Hicks

IN SUPPORT OF LARRY NOBLICK’S PALM RESEARCH
Jill Menzel

IN SUPPORT OF FIELDWORK IN CUBA
Elvis Cruz

IN SUPPORT OF THE EVENING WALKING TOUR
Patrick & Luisa Kelly

SUPPORT FOR PALM CONSERVATION IN BELIZE
Horace Hobbs

IN MEMORY OF DOROTHY SACHER
Charles P. Sacher

IN MEMORY OF SARA HAMBLEY MANZ
Elizabeth Davis

IN MEMORY OF AUNT NELL
Matt & Linda Foster

IN MEMORY OF JOHN DEMOTT, IN SUPPORT OF THE MBC SEEDBANK
Curtis Brown

IN MEMORY OF JORDAN N. STEELE, DDS.
Margaret Steele

IN MEMORY OF JUDY KAY
Kay Jacobson

IN MEMORY OF GEORGE SPARKMAN
Chip Jones

IN MEMORY OF CHRIS & CHRIS TYSON
Natalie & David Lashmit

IN MEMORY OF CHRISTIANE TYSON
Colleen Schokmann
Carol Horwitz Nett
Louisa Black
Phyllis Cronin

IN MEMORY OF KLARA FARKAS
Georgette Balance

IN MEMORY OF NELL & KLARA
Claudia Hauri

IN MEMORY OF GUY DAVID HARSHMAN
Anna L. Brownson

IN MEMORY OF ALEXANDER C. MACINTYRE
Dolly MacIntyre

IN MEMORY OF GEORGE CROCHET
Gary Wagnild

IN MEMORY OF DAVID SCHUBERT
Pamela Maher

IN MEMORY OF ELIAS BALTIN
Sylvia Baltin

IN MEMORY OF SAMUEL JOSEPH SCHNALL
Marta Magellan

IN SUPPORT OF THE MARTIN-RAMI FUND
Tessy Foundation
Beatriz Cardona
Katherine Clase
Carlos II Panilla

IN SUPPORT OF THE SIDERIS-QUINTERO FAMILY FUND
Liliana Quintero

SUPPORT FOR TOOLS AND GLOVES
Billy & Lydia Yeh

SUPPORT FOR PLANT LABELS
Stephen & Laurie Anderson
GROWING OUR TREASURES

A generous gift from Lynn Leverett and Lane Park provided the Loyd G. Kelly Conservation Nursery with an upgraded cooling system – keeping our precious seedlings at the optimum conditions for health and vigor. In addition, their support allowed us to replace our aging wooden soil bin with a new masonry structure that matches the 1932 design of the Gatehouse. Soil is an essential element here – to paraphrase Xenophon: to be successful, first know your soil. Lynn and Lane grow our successes even higher with their generous gift!

Montgomery gratefully acknowledges your unrestricted contributions in 2020

Abess, Leonard & Jayne
Add, James
Alexiou, Jon
Alfele, Patricia
Anderson, Stephen & Laurie
Anonymous (x 7)
Banks, Duane
Bass, Anne
Bauer, Brian
Bauer, Lynn
Bauer, Nick
Batule, Gloria
Beatty Family Fund
Beck, Charles
Brenner, F. C.
Brown, Marilyn
Brumbaugh, John & Wendy Coles
Cahill, William & Francis
Carrington, Patricia
Chesney, Bruce
Clancy, Keith
Clarse, Katherine & Jose Diaz
Curtis, Alan
Cutlbertson, R. Bruce
Deane, Elizabeth
de Koning, Joep
DeMarco, Debra
Diaz, Felix
Dosmann, Michael
Dowdy, Thomas
Dowlen, Dale
Doyle, Margaret
Ebert, Marlin
Ebsary, Richard
Evans, Don
Feito, Marisa
Gill, Robert
Goldman, Doug
Goldstein, Leonard
Graves, Kenneth & Nancy
Hammann, Gregg
Hanson, Mark
Haas, Lori
Haas, Martha Rogers
Haynes, Justin
Haynes, Walter
Hemmes, Don
Hernandez, Richard, Amy & Emily
Hibbard, Joe
Hibnick, Cynthia
Hochman, Seth
Holton, Dale
Hunrichs, Kenneth & Marie
Iacobucci, Dr.
Jimenez, Joan
Johnson, Beverley
Johnson, Bob & Catherine
Jude, Sallye
Kammerlohr, Dale
Katz, Michael
Kelly Tractor
Kelly, Nicholas & Barbara
Kelly, Patrick & Luisa
Kenan, Thomas
Kraus, Mark
Lashmit, Natalie & David
Lipsig, Ethan & Joanne
Lynch, Susan
Maher, Pamela
Manz, Peter & Jean
Marika, Mike
Martinez Family
McQuaid, Charles
Miles, Ana Carolina
Miller, Robert
Muir, Lynn Sr.
Negron, Nicole
Nelson, Don & Charlene
Nutt, Carol & Randy
Olwell, Brian & Therese
Paik, Alice / Paik Family Fund
Petrie, Louise
Polatsek, Sara & Mike
Popenoe, John
Reker, Barbara
Richards, Jennifer
Roemer, Robert
Sacher, Charles & Ana
Schmid, Adriano
Schwartz, Jeffrey
Slesnick, Don
Smiley, Mark & Elizabeth
Smith, Brett
Sprague, Lee
Stark, Jean
Stevenson, Dennis & Jan
Sutherland, Tracy
Talbott, Linda
Thornton, Cecelia
Tilghman, Betsy & James
Verrengia, Mary Jo
Victoria
 Wanless, Hal
Wheeler, Judith
Yeh, Billy & Lydia

IN-KIND SUPPORT
Apex Network Services
Labor & materials
Susan Butler - Cycads

FEDERAL SUPPORT
FEMA - Hurricane Irma

MISC. INCOME
Explorers Club, South Florida Chapter
FNGLA
Griffith, Patrick
Location Resources, Inc.
Philanthropic Educational Organization
Roads Scholar
SAAGA Family Wealth
St. Philips Episcopal School
University of Pennsylvania

Montgomery apologizes for any omissions or errors in accuracy

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This 1938 photograph shows the view from the second floor of the Gatehouse, looking south towards Nell's House, which can be seen in the distance. The gravel-surfaced driveway gently curves through a colonnade of Royal Palms.

This now-paved driveway lies upon the overland route known as the "Cutler Road," connecting Coconut Grove and Cutler. Nell's House was built on the highest point of the landsite, also the site of the roadway. Remnants of this ancient road – believed to be 12,000 years old – are still preserved at Montgomery, Chapman Field, and the Deering Estate. Today, the current “Old Cutler Road” runs to the north and west of these three landmarks.

Correspondence in the late 1940s between the Montgomerys and the City document their efforts to preserve the Old Cutler Road name over the city’s planned designation of Ingraham Highway (Robert and Nell prevailed). This historic photograph shows the same graceful road design principles as those seen on the front cover (see pages 6-7).