

As we continue to face diverse and unstable scenarios, our only way to increase resiliency and deliver programmatic impact is adaptation. The second year of the pandemic has included many ups and downs, a dynamic that pushed Para la Naturaleza's operations into constant change throughout 2021.

Management and administrative teams remained active, online and on-site, as circumstances required. The field team kept working steadily with the physical demands throughout our natural protected areas and nature reserves. The interpretation team was restructured to distribute Para la Naturaleza's impact evenly among its three structural pillars: tours, volunteer activities and school and community outreach; each pillar focusing on our three programmatic themes: nature conservation, historic preservation and citizen stewardship. This structure has helped distribute and improve impact. As challenges were faced in one sector, our team adapted efforts in order to focus energies as needed.

During this difficult year, the world also lost three prestigious conservationists. We express our deepest condolences for the parting of these extraordinary leaders and teachers to the world of conservation: Doctors Tom Lovejoy, E.O. Wilson and Frank Wadsworth; who transformed and expanded conservation efforts throughout their inspirational lives and commitment to nature, science, education and protection of biodiversity.

Their teachings have transformed the way we see nature today and set a path for many others to follow. Frank has been one of our local inspirations and his work permeates through our organization. Para la Naturaleza's nature reserve in Sierra Bermeja was named Natural Protected Area Frank Wadsworth, in recognition of his legacy and given his persistence to protect the region's biodiversity richness. Tom was my mentor and his passing represented a great personal loss. He guided me since I began in conservation, providing me with support on behalf of great organizations and experts across the globe. Edward was our academic lightning rod. I express my deepest gratitude to these leaders in conservation committed to the wellbeing of our planet and of humanity.

Despite ongoing limitations with conservation easement tax credits, we kept pushing forward with large additions (1,118 acres) of karst in the North. Furthermore, as we successfully conclude Hacienda La Esperanza's water channel reforestation supported by National Fish and Wildlife Foundation, we have also received approval on behalf of the Natural Resources Conservation Service to expand the recovery of the Río Grande de Arecibo's riparian corridor. These projects move Para la Naturaleza into the forefront of watershed and habitat recovery beyond Puerto Rico, expanding throughout the Insular Caribbean.

We acknowledge that 2022 will present further challenges, with a potential global war looming. One can only imagine the additional suffering of human lives and destruction of nature, while evidencing the climate collapse of our planet. Until we can correct and restore our path forward, we must keep adapting and supporting those in greater need.

Sincerely,

Fernando Lloveras San Miguel

President

Annual Report 2021

# Celebrating the life of great leaders in conservation

**Dr. Tom Lovejoy** 

(1941 - 2021)

The 'Godfather of Biodiversity,' Doctor Thomas Eugene Lovejoy III, served as an advocate for conservation throughout his career of over 50 years. Dr. Lovejoy was the first biologist to coin the term 'biological diversity' in 1980, which quickly caught on to the commonly used term 'biodiversity'.

He joined the George Mason University School of Science in Virginia in 2010 as a University Professor in the Department of Environmental Science and Policy, and as a Scientific Director of the Institute for a Sustainable Earth. Lovejoy was the founder and president of the Amazon Biodiversity Center and the Biological Dynamics of Forest Fragments in Central Amazonia Project. He served on the scientific and environmental councils of the administrations of U.S. Presidents Reagan, Bush, and Clinton and was a science envoy for Presidents Obama and Biden. He was also a member of the United Nations

Foundation and served as president of the International Union for Conservation of Nature - United States Chapter (IUCN-US).

Dr. Lovejoy served in the Board of Trustees of the Puerto Rico Conservation Trust from October 18, 1995 to May 9, 2005 and was the Chairman of the Board when attorney Fernando Lloveras San Miguel was selected to preside the Trust's operations in 2003. He served alongside Loren Ferré Rangel, Dr. Arleen Pabón-Charneco and Kate Donnelly de Romero and on January 21, 2020, the current Board of Trustees appointed Dr. Lovejoy as Trustee Emeritus.

Dr. Lovejoy was instrumental in the design and development of the Conservation Plan for Puerto Rico, Mapa-33. This Map seeks to conserve 33% of Puerto Rico's islands by 2033. The Map was accepted by the Planning Board and contributed to the approval



"Dr. Tom Lovejoy honored us with his knowledge as a Trustee and in his more recent role as a Trustee Emeritus of the Puerto Rico Conservation Trust. We celebrate his enormous legacy in favor of the conservation of the planet, especially tropical rainforests, their biodiversity, and his fundamental contributions further understanding climate change. I have lost a mentor and a great friend. I will always be grateful to him for inviting me to participate in this great cause, a cause that has become the center of my very own existence."

Fernando Lloveras San Miguel President

of the Land Use Plan (Plan de Uso de Terreno, PUT).

For decades, Dr. Lovejoy was associated with the National Geographic Society as a member of the Society's Research and Exploration Committee, the Ocean Restoration Advisory Council, and as Chair of the Grants Committee for Big Cat Initiatives and the Grand Energy Challenge Advisory Committee.

In 2019, he was selected as a National Geographic Explorer-at-Large, a title he held until his passing on Saturday, December 25, 2021 at the age of 80. We feel the great loss to the scientific and pro-nature community and share our deepest condolences to the Lovejoy family and our deepest appreciation for all he contributed to conservation throughout the islands of Puerto Rico.

Para la Naturaleza

### Dr. E. O. Wilson

(1929 - 2021)

"We should preserve every scrap of biodiversity as priceless while we learn to use it and come to understand what it means to humanity."

This was one of the many valuable quotes from Dr. Edward Osborne Wilson, a world-renowned myrmecologist, nicknamed, the "Ant Man."

Dr. Edward Osborne Wilson, University Research Professor Emeritus at Harvard, was the guiding force that shapes the mission of the E. O. Wilson Biodiversity Foundation.

In his long career, he transformed his field of research—the behavior of ants—and applied his scientific perspective and experience to illuminate the human circumstance, including human origins, human nature, and human interactions. Wilson was also a pioneer in spearheading efforts to preserve and protect the planet's biodiversity.

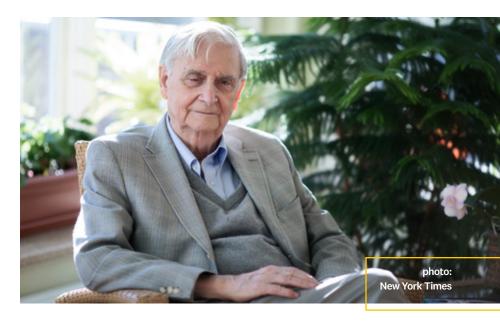
Wilson was born in Birmingham, Alabama, in 1929. Growing up in the countryside around Mobile, he was entranced by nature and all its creatures. A fishing accident left him blind in one eye, interfering with his ability to study birds and other animals in the field. He decided to focus on insects -creatures he could examine under a microscope.

"Most children have a bug period," he wrote in his memoir *Naturalist*, "I never grew out of mine." While still in high school, Wilson discovered the first colony of fire ants in the United States. After earning a B.S. and M.S. in Biology at the University of Alabama, he received his Ph.D. from Harvard University in 1955.

Early in his career, Wilson conducted work on the classification and ecology of ants in New Guinea and other Pacific islands, as well as in the American tropics. In 1963 his work and conception of species equilibrium led him to the theory of island biogeography, which he developed with the late Robert H. MacArthur of Princeton University.

In the late 1950s and 1960s, Wilson played a key role in the development of the new field of chemical ecology. Alongside several collaborators he worked out much of the pheromone language of ants, and with William H. Bossert of Harvard University he created the first general theory of properties of chemical communication. By the late 1970s, Wilson was actively involved in global conservation, adding to and promoting biodiversity research. In 1984 he published *Biophilia*, which explored the evolutionary and psychological basis of humanity's attraction to the natural environment. This work introduced the word 'biophilia', the desire to commune with nature, into the language and has been influential in the shaping of modern conservation ethic. In 1988 Wilson edited the volume BioDiversity, based on the proceedings of the first United States National Conference on the subject.

In 1971 Wilson published his second major synthesis, *The Insect Societies*, which formulated the existing knowledge of the behavior of ants, social bees, social wasps, and termites, on a foundation of population biology. In it he introduced the concept of a new discipline, sociobiology, the systematic study of the biological basis of social behavior in all kinds of organisms. In



1975 he published *Sociobiology: The New Synthesis*, which extended the subject to vertebrates and united it more closely to evolutionary biology. Sociobiology was later ranked in a poll of the officers and fellows of the International Animal Behavior Society as the most important book on animal behavior of all time, and is regarded today as the founding text of sociobiology and its offshoot, evolutionary psychology.

The Ants, co-written with Bert Hölldobler and published in 1990, is the definitive work on the Earth's most abundant insect and the only professional science work to win a Pulitzer Prize. The two authors reunited in The Superorganism: The Beauty, Elegance, and Strangeness of Insect Societies (2008), which examines eusocial species such as ants, termites, and bees more broadly. In 1995 Wilson published a bestselling memoir, Naturalist, recalling his youthful fascination with nature and his growth as a scientist, and tracing the evolution of the scientific fields he has helped to define.

Throughout his life, Wilson spearheaded efforts to preserve the world's biodiversity. He played a central role in establishing the *Encyclopedia of Life*, which has the goal of curating a web page for every one of Earth's species, and he has mobilized the movement to protect the world's "hot spots," the realms of highest biodiversity on the planet. In 2011, Wilson led scientific expeditions to the wild preserve of Gorongosa National Park in Mozambique and the archipelagoes of Vanuatu and New Caledonia in the Southwest Pacific.

In addition to authoring books and articles on entomology and conservation and lecturing in many countries, Wilson served on the Boards of Directors of the American Museum of Natural History, Conservation International, The Nature Conservancy, and the World Wildlife Fund, and was key consultant of the New York Botanical Garden, Columbia University's Earth Institute, and many other environmental and scientific organizations.

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### **Dr. Frank Howard Wadsworth**

(1915 - 2022)

Dr. Frank H. Wadsworth was a pioneer in the studies of forest management and conservation. As nature lover and a successful forester, Dr. Frank Howard Wadsworth dedicated his life to all aspects of environmental conservation.

Wadsworth was born on November 26, 1915, in Chicago, Illinois and earned his doctorate degree in forestry from the University of Michigan. In 1942, he moved to Puerto Rico and began working as a Scientist for the U.S. Forest Service and in 1956, was appointed as the Supervisor of the Caribbean National Forest, later becoming Director of the International Institute of Tropical Forestry.

He was a member of the Puerto Rico Conservation Trust's Advisory Council from 1978 to 1987 and in 2020 was recognized as an Emeritus Advisor.

In each one of his roles, he conducted hundreds of investigations and wrote multiple books on the biodiversity of the El Yunque National Forest and other forest reserves of the Caribbean archipelago. Among them, Common Trees of Puerto Rico and the Virgin Islands (1964-1989) co-authored with Elbert Little, and Flora of Virgin Gorda (1976), co-authored with Little and RO Woodbury.

Wadsworth also helped found the Puerto Rico Natural History Society in 1960 and the Santa Ana Environmental Center in Bayamón, which began operations in 2016.

Throughout his life, this "patriot of nature" was part of the Boy Scouts of

America and, in 1952, founded a group called Nature Patrol with the main goal of training younger generations in environmental conservation.

"To me, Frank is and will always be my guide in the conservation agenda that we have as a country. I treasure having gotten to know him and having been able to understand, capture, share, and enjoy his passion for life,"

Fernando Lloveras San Miguel President

His valuable research and countless years of experience make him an invaluable source of references for those who promote the conservation of tropical forests on the Island. We are extremely grateful for his legacy, for his kindness and for his passion for education which transcends generations and will continue to live on in those of us who knew him and, like him, seek to protect the forests of Puerto Rico.

Dr. Frank H. Wadsworth, passed away at age 106 on January 5, 2022 in San Juan, Puerto Rico. His granddaughter, Alejandra Fernández has been participating at Para la Naturaleza's Nature Immersion Workshops since 2015 and became a team leader since 2018 until the summer of 2022, when she goes off to college.

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# Covid-19 Response: Staying Safe

Taking on the unprecedented challenges faced, Para la Naturaleza implemented safety policies and efforts committed to maintaining all employees safe. Positive and/or potential cases were duly notified and promptly referred to our contracted physician, Dr. Gascot, whose valuable contribution permitted us to care for our employees as quickly as possible, reducing transmission rates.

Para la Naturaleza successfully followed safety and health protocols established, remaining steadfast in its voluntary vaccination policy, and safety protocols coordinated and established for specific programming, activities and work areas.

Having learned from this experience our team has achieved the needed adaptation, and together will keep improving resilience and response to this and future difficult circumstances.

"The meticulous care implemented through our Covid-19 Response Protocol, in combination with our case-by-case personal consultation with an in-house medical doctor, have been key in overcoming the myriad challenges posed by the pandemic on our outreach and educational programs. A successful example of adaptation and prevention was the drive-through distribution of over 10,000 tress in La Siembra in April, where we safely educated and oriented participants in the proper selection and tree planting procedures of the 56 native tree species distributed."

Manuel Mercado Safety and Security Coordinator





# Instituto Nueva Escuela and Para la Naturaleza transform environmental education

Throughout the past year, Instituto Nueva Escuela (INE) and Para la Naturaleza have been operating and developing the project Sembrando Regresamos which began in 2019 with six collaborating Montessori Schools for the creation and development of school gardens and butterfly farms in order to create educational spaces in nature, environmental awareness and spaces to have and develop direct immersion experiences.

The positive impact these schools have received on behalf of students, parents, faculty and their respective communities as a result of this program has been immense, and has led INE to create a permanent project expanding the knowledge acquired to create similar experiences for additional Montessori schools.

With funding from the National Recreation Foundation (\$140,000), Fundación Colibrí (\$50,000) and Fundación Plaza del Caribe (\$20,000), Para la Naturaleza is now working with an additional fourteen INE schools.

Another successfully ongoing collaborative project between Para la Naturaleza and INE is the After-

School Immersion in Nature Program, providing students from preschool to ninth grade with direct experiences, creating and nurturing long-standing connections with nature, while raising awareness about environmental problems such as the lack of food security and the destruction of vital ecosystems for pollinators.

The main outcome of this program is the individual commitment made by participants to become a spokesperson for conservation and to educate others in seeking viable practices and alternatives in their communities towards nature conservation. Para la Naturaleza believes that each personal commitment has a multiplying effect, as each participant becomes a steward of nature, promoting a sense of responsibility towards its conservation among their families and peers as a result of their transformative direct immersion experience.

"The Sembrando Regresamos Project seeks to rethink the relationship that Para la Naturaleza has had with school communities, rethinking students' relationship with our organization, with the nature that surrounds the communities they live in and with the natural reserves and historic sites that we protect. What we are constantly provoking is to begin to visualize nature, and once nature is made visible, we help establish that mutualistic relationship, developing an exchange with the child, the classroom, the community and their surrounding environment."

### **Therel Santos**

Interpretative Activities Coordinator

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# Art Residency: an intersection of Science, Art and Nature

In April of 2021, Para la Naturaleza launched the Art Residency Program, focused on the interconnection among the disciplines of Art, Science and Nature to increase our experimental interaction among creative minds and land conservation. This Program aims to create bridges of communication with the art communities and art institutions, further broadening Puerto Rico's building of biodiversity and resilience against the rising disparities of climate change. With this focus Para la Naturaleza created an Art Residency in Las Lunas Natural Protected Area in Caguas, which will host invited resident artists and art curators.

Las Lunas lies within the subtropical wet forests of Sierra de Cayey, a ridge in the eastern part of the central mountainous region, within Para la Naturaleza's Metro-Center Region. The property's design was conceived by architect and ceramist Jaime Suárez, and then became home to ceramist Toni Hambleton and family, both of which created a unique, inspirational hub for distinguished representatives of Puerto Rico's cultural scene, which Para la Naturaleza aims to maintain and encourage through the Art Residency. We hope this program becomes an ongoing collaboration with local and foreign artists and art curators, continuing innovative investigations. Art creates an opportunity to pose powerful questions and this alliance will bring nature conservation into the forefront of a cross-section of communities while also creating cutting-edge ideas and bold actions needed to address some of our society's largest issues.

Dr. Luis Berríos-Negrón is Para la Naturaleza's first Art Resident, focusing his post-doctorate work on further exploring environmental form through decolonial spatial and sculptural research and experimentation. During his PhD, he investigated how the metaphor of 'greenhouse' is culturally, historically and technologically situated, and how it shapes colonial memory. During his investigation, he developed intersectional studies of various medicinal gardens in Puerto Rico, Germany, Italy, Sweden, and Brazil. Dr. Berríos-Negrón is originally from Puerto Rico but lives and works between Stockholm, Berlin, and Copenhagen. His work is internationally recognized, with exhibitions in a range of institutions and events such as, Savvy and Transmediale in Berlin (DE, 2019), the Museum of Archeology of Bahia (BRA, 2017), the 3rd Biennial of Art of Bahia (BRA, 2014), representing Germany in the 10th São Paulo Biennial of Architecture (BRA, 2013) among others. He was one of four finalists for Harvard's Wheelwright Prize (2020), is the founder of the Anxious Prop art collective and the Paramodular environmental design group, and is Associate Member of the M.I.T. Council for the Arts. He has worked and taught internationally while based in Berlin since 2006 and pursued his Doctorate at Konstfack / KTH (2015-2020) in Stockholm. Dr. Berríos-Negrón also holds a Master of Architecture from Massachusetts Institute of Technology (2006) and a Bachelor of Fine Arts from Parsons New School University (2003).

As part of the Art Residency, Dr.
Berríos-Negrón held a series of lectures
titled, "Impressive Environmental ParaStructures," each dedicated to a chapter
of his post-doctorate investigation
studies. The lectures have been
transmitted via Para la Naturaleza's
YouTube channel.



Para la Naturaleza



# ¿De qué madera estás hecho?

This year gave opening to the "¿De qué madera estás hecho?" ("What wood are you made of?") exhibition in Casa Ramón Power y Giralt in Old San Juan, showcasing 50 baseball bats made from recovered woods after hurricane María, where a devastating 30% Puerto Rico's trees is esteemed to have been lost.

The exhibition focuses on the history of baseball in Puerto Rico and its relationship to trees, which provide the wood to make the bats for this beloved sport. The artist behind this interesting and unique piece is engineer Ángel Colón, a life-long friend and collaborator of the Conservation Trust for Puerto Rico and Para la Naturaleza, whose interest in wood and passion for baseball inspired him to create a bat with each of the tree species he recovered after the hurricane. Ángel has generously shared his collection in this collaborative exhibition with Para la Naturaleza, each bat posing as an example of his noble commitment to the conservation of our history, culture and environment, and of the relationship between man and nature, "when both come together to face great adversaries and achieve great feats," as eloquently expressed by Colón.

Para la Naturaleza stewards a wide, diverse and rich variety of resources that represent Puerto Rican history, culture and identity and also, recognizes the connectivity between history, ecology, the land, and their people. With this focus, we aim to further develop educational experiences, impacting broader audiences with diverse interests.

"The idea was to rescue and reuse this fallen wood posthurricane. This project was developed with the main focus of offering an educational experience that would permit its audience appreciate the quality, weight, colors and other unique features of each sample. This is a collection of the great and beautiful array of wood available to us, that in the aftermath of a devastating climatic event like María, many of us would not have imagined how we can rescue it and grant it a new beginning, a new life."

**Ángel Colón**Engineer and
Esteemed Collaborator

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# La Siembra: a new approach

La Siembra took place April 22nd through the 24th of 2021. This special event was coordinated as a collective call to action towards the reforestation of our islands. Amid the Covid-19 pandemic's public health protocols and gathering restrictions, Para la Naturaleza organized a native tree pick-up, where the public registered and reserved the species that best fit their environment. This three-day event was envisioned as a feasible and safe adaptation of our anticipated traditional annual Feria, throughout which botanical information on the native species and proper care was also distributed.

Tree distribution was held in five locations: the Río Piedras Tree Nursery in San Juan, Hacienda La Esperanza in Manatí, Cañón San Cristóbal in Barranquitas, Plaza del Caribe Shopping Mall in Ponce, and Cabezas de San Juan in Fajardo.

Recognizing reforestation as the most effective solution for climate change problems, La Siembra also included several tree plantings by Para la Naturaleza employees throughout five natural protected areas: Cañón San Cristóbal in Barranquitas, Medio



Mundo y Daguao in Ceiba, La Parguera in Lajas, Río Toro Negro in Ciales and La Pitahaya in Canóvanas.

The experience's overall success has now made La Siembra another staple organizational event in Para la Naturaleza's annual programming calendar in support of our primary objective of promoting biodiversity and healthy ecosystems throughout the islands of Puerto Rico, continuing reforestation efforts alongside our communities and stewards of nature.

Efforts and impact carried out in La Siembra were so well received that extended tree distributions and education efforts were coordinated throughout the regions during the remaining months of the year, including in Finca Alzamora in Mayagüez and among the community in Vieques. La Siembra has now become part of Para la Naturaleza's yearly programming, endeavors and activities to be replicated and built upon throughout the years to come.

"I think the distribution of trees in the beautiful island of Vieques in these pandemic times we are living has been a great success. This was the first time an event like this was held in Vieques. The people who participated and collaborated have reacted very positively and over 400 trees were distributed. We hope to repeat this activity next year!"

Julián García Martínez East Region Special Units Coordinator

# Mangletón: protecting coasts



Para la Naturaleza's first Mangletón was held in August of 2021 in Hacienda La Esperanza in Manatí with the participation of Para la Naturaleza volunteers and staff and the support of the National Fish and Wildlife Foundation (NFWF). This particular reforestation effort resulted in the planting of 3,750 Red Mangrove (Rhizophora mangle) seeds at the mouth of the Río Grande of Manatí in order to combat coastal vulnerabilities, such as the loss of land and the widening of the river created by floods, erosion, tidal waves and other atmospheric phenomena.

Para la Naturaleza later held an internal Mangletón, planting another 1,600 of the same seeds in the adjacent area.

Mangroves are imperative for the stabilization of the coastline's ecosystem, aiding in the prevention of erosion, and absorbing storm surge impacts during extreme climatic events, such as hurricanes. Mangroves also protect water quality by removing nutrients and pollutants from stormwater runoff before they reach seagrass habitats and coral reefs. Mangrove systems also

provide shelter to a wide range of wildlife species, serving as nursery habitats for many aquatic species, as well as nesting areas for coastal bird species. Mangrove forests also transport carbon dioxide from the air and store carbon dioxide in great quantities. This endeavor's primary objective is to create more resilient spaces, while increasing the populations of fauna and flora in the area, and positively impacting the neighboring community's quality of life.

"This was one of the strongest efforts of riparian reforestation after the hurricanes in 2017. It was also one of the most adventurous ones, kayaking to plant mangroves along the coast of the Río Grande de Manatí. This was such a fulfilling experience and we are looking forward to continue the expansion of this important effort throughout the Caribbean!"

### Carlos Torres

West Region Superintendent and Mangletón Volunteer

### **FORESTS**



Lamb ribs with a salad of fresh pigeon peas, celery, papaya, passion fruit leaves, "chironja" juice and roasted chard







MEET THE CHEF

MEET THE CHEF

GARCÍA

### RIVERS



Pumpkin curry with turmeric, coconut milk, and cauliflower, served with spicy cilantro sauce and tamarind-date chutney



FRANCIS GUZMÁN



MEET THE CHEF

MEET THE CHEF

### COASTS



Lobster "Asopao" with plantain balls



MARÍA GRUBB

INDERGROUND DINING

MEET THE CHE



MEET THE CHEF

# Nature Sound Bites: nurturing agroecology

The fourth annual Para la Naturaleza Farm to Table fundraising event, Nature Sound Bites, was held on December 11th. This year's event incorporated a new element to the culinary experience, as well as original compositions by Fabian Wilkins inspired by the sounds of nature captured throughout Para la Naturaleza's natural protected areas. The unique sensory immersion in sounds of Puerto Rico accompanied the culinary experience focused on agroecological products, which was led by six of our local distinguished collaborating Chefs: Francis Guzmán, Natalia Vallejo, Gabriel Hernández, María Grubb, Lucía Merino, and Kevin García. Each Chef selected a unique ecosystem and prepared their culinary experience according to the products of the selected regions throughout Puerto Rico: forests, rivers, and coasts.

The event also had a virtual component where several individual, foundation, and corporate supporters throughout the U.S. and in Puerto Rico participated, expanding our outreach to generous sponsors who

have made long-term commitments to support our efforts. A special campaign was also launched as part of this initiative for Giving Tuesday where each donation was matched by Lin-Manuel Miranda and the Miranda Family Foundation. Each donation of \$10 or more received a 'Digital PLN Box' as a gift with the sounds and flavors of Puerto Rico experienced in the event. In total, Nature Sound Bites raised over \$200,000 and the funds directly supported the Para la Naturaleza Solidarity Fund, an initiative that provides nature-based solutions to the challenges we face as a society.

"We loved it and feel privileged to support Para la Naturaleza. We feel that in this way we can contribute something to healthier ecosystems today and tomorrow for our people, wildlife and future generations, including our own grandchildren."

**Lisette Núñez** Nature Sound Bites' Participant

### **NATURE SOUND BITES**

197

participants (104 virtual)

6

local participating Chefs

**\$208,651** total funds raised

### **DIGITAL PLN BOX**

**3** origina

original recipes by local Chefs

3

Nature Sound Bites by Fabian Wilkins

\$208,651

Directory of Puerto Ricobased Organic Farmers and Producers to source fresh ingredients

# SOLIDARITY FUND 2021 ACHIEVEMENTS 102,954 trees planted 74,822 trees produced 132 ecological farmers supported resilient centers completed 10 self-guided trails opened 4,766 historic artifacts evaluated \$1,623,673 funds raised in 2021 \$2,398,120 total funds including \$774,447 raised in 2020 Hacienda Margarita Lares Puerto Rico



# Para la Naturaleza Solidarity Fund

The Para la Naturaleza Solidarity Fund continues to be essential to Para la Naturaleza's initiatives, providing critical resources to five distinct areas: reforestation, agroecology, community conservation, outdoor trails, and historic preservation. Throughout 2021, fundraising efforts for the Solidarity Fund continued, resulting in over \$1.6 million in donations on behalf of individual and institutional supporters since its launching.

Additionally, a key highlight this year was the integration of Biodiversity and Conservation as a sixth area of focus within the Solidarity Fund. Launched during the later part of the year, Biodiversity and Conservation received \$69,784 in support, extending research on Puerto Rico's ecosystems in order to provide better understanding on how the climate crisis is affecting the Puerto Rican archipelago, one of 35 biodiversity hotspots in the world. With further data we will also be able to create more effective management plans for our natural protected areas in the face of environmental challenges in the future.

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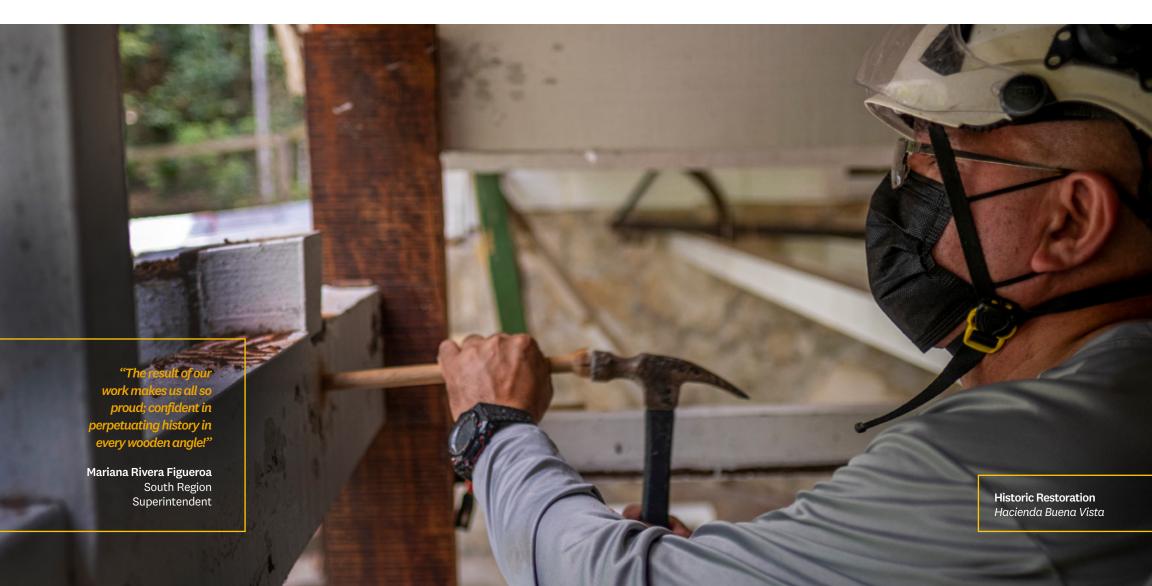
# Hacienda Buena Vista implements 19th century techniques in historic restoration

Hacienda Buena Vista carried out the restoration of the property's Beneficiado, specifically the coffee plantation's sliding drawers' (correderas), the heart of the coffee processing where the grain was depulped, washed and dried. This restoration represents the second comprehensive intervention since the 1980's. Following original construction methods the team carefully selected appropriate native trees, such as ausubo (Manilkara bidentata) and capá prieto (Cordia alliodora); also assuring the correct

chiseling for the beam's escopladuras in order to recreate 19th century tongue and groove construction techniques. This meticulous work, with most of the craftsmanship carried out by hand, required the team first disassemble the structure to replace damaged wooden beams, later reassembling it like a jigsaw puzzle with specially crafted parts.

One of the main restoration project's objectives was to preserve the transfer of knowledge on traditional wood construction and restoration

techniques. As a result, Para la
Naturaleza's staff gained a renewed
appreciation for the history of
Hacienda Buena Vista. The process was
fully documented and interviews were
conducted with those who participated
in the restoration, as well as remaining
staff who was familiar with the
work carried out in the 1980s. This
experience has linked past techniques
to present restoration practices,
adding to our individual and collective
knowledge, while maintaining the
integrity of protected historic sites and
conserving our cultural heritage.



# Resilient Community Centers: fully operational

"We are also extremely fortunate to have the generous support of a local non-profit organization, Para la Naturaleza, who donated a robust off-grid solar system and, rainwater harvesting and filtration system that will allow us to respond effectively to natural disasters and times of emergency without interruptions to our service."

### **Owen Ingley**

Executive Director, Plenitud Resilient Center, Las Marías



Perhaps one of Para la Naturaleza's most important accomplishments in support of human resiliency has been the successful establishment of 33 fully working Community Resilient Centers built and rooted throughout allied communities across the islands of Puerto Rico. These hubs were designed to withstand emergencies and serve the communities in times of need, also serving as communal spaces where educational and social services are regularly provided.

This collaborative project that began with the focus of strengthening

these communities' resilience in facing climate disparities and other challenges throughout, has now developed into a strong network of 33 Para la Naturaleza Community Resilient Centers, available to approximately 103,134 neighboring residents throughout, who now have access to solar energy power and water capturing filtration systems. Each Resilient Center is supplied with 6.84 kilowatts of solar energy and water capturing and filtration systems that may contain up to 1,000 gallons for each of the communities' needs.

"Often discouragement will come to you, but when you look and say: this is my community, I live here, and I want things to look good and that my community has what it takes to be well, so be it. I think we could not have done many things if we hadn't had the support of Para la Naturaleza, and when hurricane María happened, they appeared here and began to say: 'You can do it; Why not?...' So even if going through the greatest discouragement, we keep working- and moving forward."

### Idabel Torres Rivera

Community Leader, Resilient Center Juan Colón Hernández in Jaguas, Marueño, Ponce

# Major banks join Para la Naturaleza's habitat restoration initiatives

As part of Para la Naturaleza's mission in educating on the importance of incorporating biodiversity conservation awareness into long-term collaborations and projects, efforts towards strengthening stewards of nature in the corporate sector have yielded positive and ongoing results. During 2021, Oriental Bank and Banco Popular took the lead in nature conservation efforts in collaboration with our mission.

Banco Popular's increased its contribution towards Reforestation with its commitment to plant 20,000 native trees throughout Para la Naturaleza's natural protected areas. This support resulted in the planting of 9,435 native trees in Pitahaya in Canóvanas and La Parguera in Lajas, representing a total of 21-acres of land covered with native trees between both nature reserves.

A total of sixty employees and their families participated in planting events contributing to the development of strong and resilient forests, contributing to the institutional goal of planting 100,000 native trees annually. The involvement of their employees and the impact on carbon

sequestration that these plantings will provide has inspired Banco Popular to committing to the planting of an additional 20,000 trees in 2022.

Oriental Bank took bold steps to support several of Para la Naturaleza initiatives, committing to the development of agroecological gardens. The community garden in Marueño, in the Jaguas section of Ponce, now enjoys an enhanced garden that includes amenities for rainwater collection and storage, as well as new and improved propagation tables and tools.

Also, Oriental Bank contributed to educational efforts for visitors, volunteers and communities in Hacienda La Esperanza, supporting Para la Naturaleza's first Model Agroecological Garden while implementing diverse agricultural practices within the agroecological framework and integrating environmentally conscious techniques. Employees have been supporting our community efforts with volunteer work in both projects. Furthermore, Oriental Bank was the main sponsor of Para la Naturaleza's principal fundraising event Nature Sound Bites.



# Biodiversity conservation goes high-tech: identifying species through acoustic monitoring

Para la Naturaleza is utilizing innovative passive acoustic monitoring in rapid inventories of biological diversity in natural protected areas to detect a diversity

of species, including birds, bats, frogs, and insects, as well as to perform soundscape analysis. This technique consists of using an autonomous recording unit to record the vocalizations of organisms within the study area, later used to detect the presence of individual species identified (to the extent possible) through programs such as Audacity, Raven, Arbimon or Kaleidoscope. This useful work tool has facilitated and expanded sampling area and data collection.

Two ongoing uses of this technology have detected the presence of the Elfin-wood warbler (Setophaga angelae) in the Río Maricao area and that of the Richmond's coqui (Eleutherodactylus richmondi) in the Río Encantado area.

The Elfin-wood warbler (Setophaga angelae) has been detected in four of the eight locations where sound recorders were deployed January through March of 2021 in the Río Maricao area: while the presence of the Richmond's coqui (Eleutherodactylus richmondi) has been detected in three of the eleven locations where sound recorders were deployed in the Río Encantado area, (having been detected for the first time in this area in December of 2018). Para la Naturaleza will continue to expand its use of autonomous recording units throughout natural protected areas, detecting changes in habitat and monitoring diverse species to establish new localities in order to perform occupancy probability and pattern matching analysis.

"Passive acoustic monitoring involves choosing a location for the installation of a recording device for the purpose of monitoring and documenting species. This technology permits us to obtain information within determined areas and timeframes. It is also a fantastic resource available for others to appreciate the richness of species remotely. This monitoring also permits us to compare and contrast documented species within our natural protected areas in different moments, such as before and after a hurricane, granting us further knowledge on the natural protected areas we protect and its inhabitants."

### Omar Monzón

Conservation and Biodiversity Specialist





# Making our Land Use Plan stand firm

Puerto Rico was able to complete a Land Use Plan (Plan de Uso de Terreno, PUT, for its acronym in Spanish) for the first time in 2015, after several failed attempts. This Land Use Plan is a requirement of Law 550 of 2004. Para la Naturaleza was one of the organizations that understood the important necessity for Puerto Rico to have land regulation, and was actively involved in the development and approval of the Land Use Plan, its defense and compliance.

The PUT establishes land classification for all Puerto Rico, categorizing land as: Urban Land, Planned Developable Land, Common Rustic Land and Specially Protected Rustic Soil. This last category is closely related to one of Para la Naturaleza's main objectives, the protection of 33% of Puerto Rico by 2033.

The Specially Protected Rustic Soil Ecological, Water and Landscape classifications envision protecting 32.63% of the Islands' land in the future. Unfortunately, the Planning Board and the municipalities have not been in compliance with the process of updating and adapting the hundreds of

planning instruments, which should have been completed in 2017, as required by the PUT.

During 2018 to 2020, Para la
Naturaleza participated and
collaborated in the PUT's defense,
so that several plans that had been
adopted to the PUT, were not repealed
by the Planning Board. The Supreme
Court confirmed the validity of
the nature reserves: Playa Lucía in
Yabucoa, Punta Cabullones in Ponce,
Punta Petrona in Santa Isabel, Punta
Guilarte in Arroyo, Mar Chiquita in
Manatí, Finca Nolla and Río Camuy,
both in Camuy.

During 2021 Para la Naturaleza found it necessary to challenge the 2020 Joint Regulation before the Appellate Court, which declared it null and void on April 12, 2021 for not complying with the processes of adequate notification in the notices about its content and not providing a broad process of citizen participation in the public hearings. Para la Naturaleza aspires to further promote citizen stewardship and significant and effective changes in order to conserve the islands of Puerto Rico and reach our common goal.

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# A new protected area is born in the Northern Karst

In October 2021, Para la Naturaleza received two significant and adjacent land donations from the Ortiz Brunet family in the northwestern part of the main island. One is a 300-acre parcel between the Abra Honda and Quebrada wards in Camuy, and the other is comprised of three adjacent parcels, totaling 818-acres between the Yeguadilla Occidental, Campo Alegre, and Bayaney wards in Hatillo.

The donation of these properties allowed the creation of two new natural protected areas, Lomas del Noroeste in Hatillo and Lomas de Guarionex in Camuy, strengthening the connectivity between the northern karst zone, Río Abajo State Forest, and the Guajataca Forest. In addition, these areas are critical for endemic species protected under local and federal laws, such as the Puerto Rican parrot (Amazona vittata), the Puerto Rican boa (Chilabothrus inornatus), and the Calyptranthes estremerae tree.

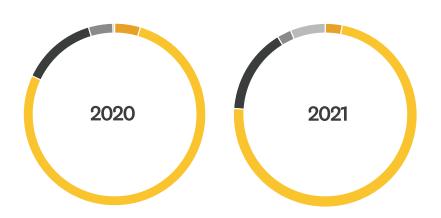


In the case of Lomas del Noroeste in Hatillo, 80% of the flora identified is native. The area serves as a natural refuge and is therefor rich in native, migratory, and endemic flora and fauna species, some of which are protected under local and federal laws. In addition, its diverse topography has formed several microhabitats for plant species such as ferns, orchids, snails, and bryophytes.

In Lomas del Guarionex in Camuy, 77% of the flora identified is native, represented by individuals of the petate palm (Leucothrinax morrisii), guayabota (Diospyros revoluta), and the tree Sloanea amygdalina. Endemic species in this area represent a 6% and include the ausuba (Manilkara pleeana), the bush Calyptranthes acevedoi and the San Juan creeper (Pinochia corymbosa subsp. portoricensis).

# **Financials**

## **SOURCES OF FUNDS**

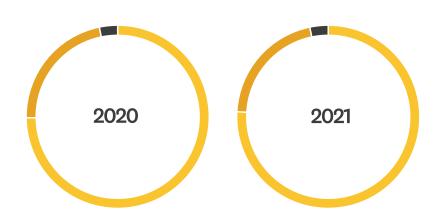


	2020	2021	%	
Income from Notes and Preferred Securities	\$ 908	\$ 884	-3%	$\leftarrow$
Portfolio Income*	15,335	21,732	42%	$\uparrow$
■ Donations, grants and other gifts	2,655	4,772	80%	$\uparrow$
■ Other income	858	744	-13%	$\downarrow$
Land Donations and easements	60	1,835	2958%	$\uparrow$
Total	\$ 19,816	\$ 29,967	51%	$\uparrow$

\*unrestricted portfolio income

\*Selected financial data. Numbers are expressed in thousands.

## **OPERATING USES OF FUNDS**

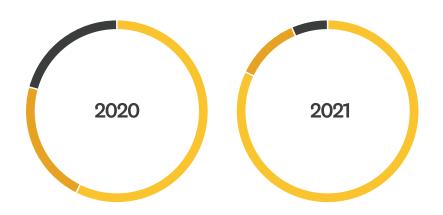


	2020	2021	%	
Program Services	\$ 16,462	\$ \$16,730	2%	$\uparrow$
Management and Support	4,831	4,619	-4%	$\downarrow$
■ Fundraising	709	714	1%	$\rightarrow$
Total	\$ 22,002	\$ 22,063	0%	_

<sup>+</sup> authorized endowment draw

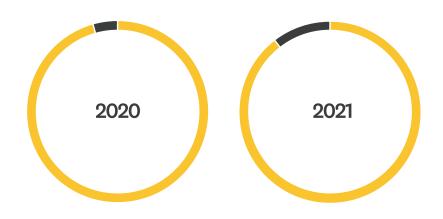
<sup>\*</sup>Selected financial data. Numbers are expressed in thousands.

# **CAPITAL INVESTMENTS**



	2020	2021	%	
Land Acquisition	\$ 579	\$ 2,108	264%	$\uparrow$
Site Development and Improvements	221	295	33%	$\uparrow$
Furniture and Equipment	209	165	-21%	$\downarrow$
Total	\$ 1,009	\$ 2,568	155%	$\uparrow$

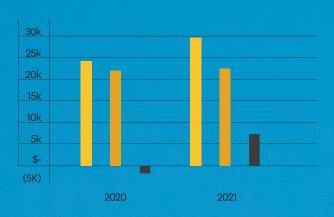
# **TOTAL USES OF FUNDS**



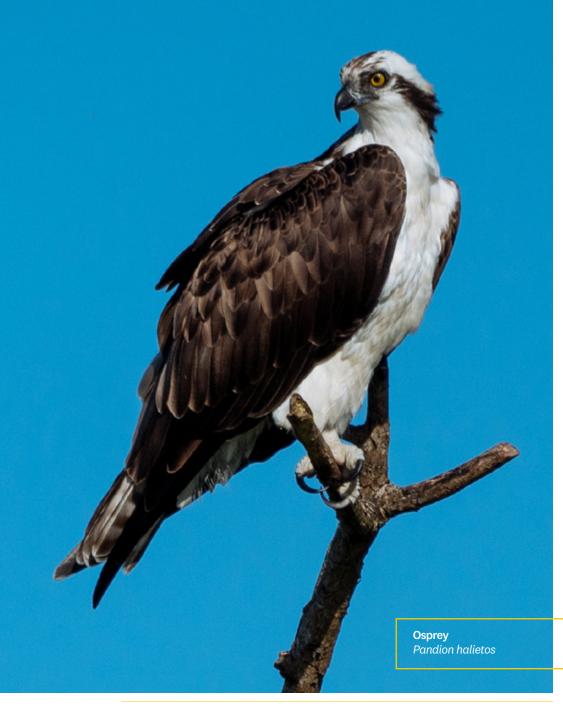
	2020	2021	%	
Operating	\$ 22,002	\$ 22,063	0%	_
■ Capital	1,009	2,568	155%	$\uparrow$
Total	\$ 23,011	\$ 24,631	7%	$\uparrow$

<sup>\*</sup>Selected financial data. Numbers are expressed in thousands.

### REVENUE LESS OPERATING EXPENSES



	2020	2021	%	
Operating Revenues	\$ 19,816	\$ 29,967	51%	
Operating Expenditures	22,002	22,063	0%	
Excess Funds	\$ (2,186)	\$ 7,904	462%	



\*Selected financial data. Numbers are expressed in thousands.

# **Friends** and Supporters

### \$1.000 - \$4.999

7.29 Events Corp. Amgen Puerto Rico Andrew Darrell Anne Huber

Anonymous (6 donors)

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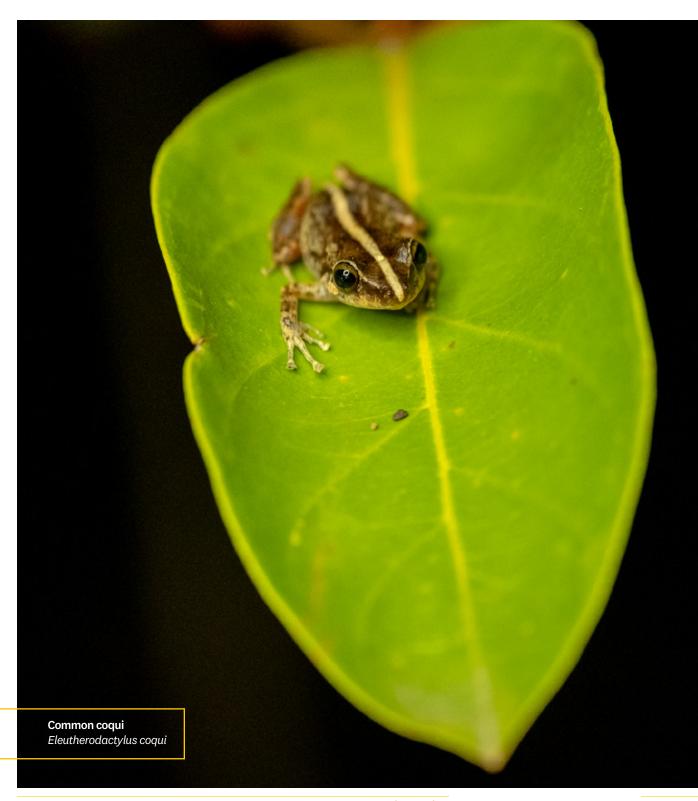
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USDA Natural Resources Conservation Service

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**Brenda Torres Barreto** 

As of December 31, 2021.

# 2021 **Achievements Summary**



**20** 

Sembrando Rearesamos 2021 partnerships with INE schools



fully recovered Covid-19 cases







student participants in the Immersion in Nature afterschool program 2021



17,161

trees were delivered to 2.342 participants at La Siembra 2021



¿De qué madera estás hecho? **Exhibition opening** in Casa Ramón Power v Giralt in Old San Juan. showcasing 50 baseball bats made from recovered woods

# \$69,784

received in support for the integration of Biodiversity and Conservation as a sixth area of focus within the Solidarity Fund





**Red Mangrove** trees (Rhizophora mangle) planted in Para la Naturaleza's first edition of Mangletón in Hacienda La Esperanza, Manatí



Passive acoustic monitoring detected the presence of the Elfin-wood warbler (Setophaga anaelae) in the Maricao River: and of the Richmond's coqui (Eleutherodactylus richmondi) in the Encantado River area



in funds raised at Nature Sound Bites, a farm-totable fundraising event



Community Resilient Centers, available to approximately 103,134 neighboring residents

Para la Naturaleza challenged in the Court of Appeals the 2020 Joint Regulations proposed by the Puerto Rico Planning Board. The court ruled in favor of PLN, overturning the Regulations





Oriental Bank and Banco Popular took the lead in the nature conservation efforts in collaboration with our mission

Donation of Lomas del Noroeste (818 acres) in Hatillo and Lomas de Guarionex (300 acres) in Camuy, strengthening the connectivity between the northern karst zone, Río Abajo State Forest, and the **Guajataca Forest** 

