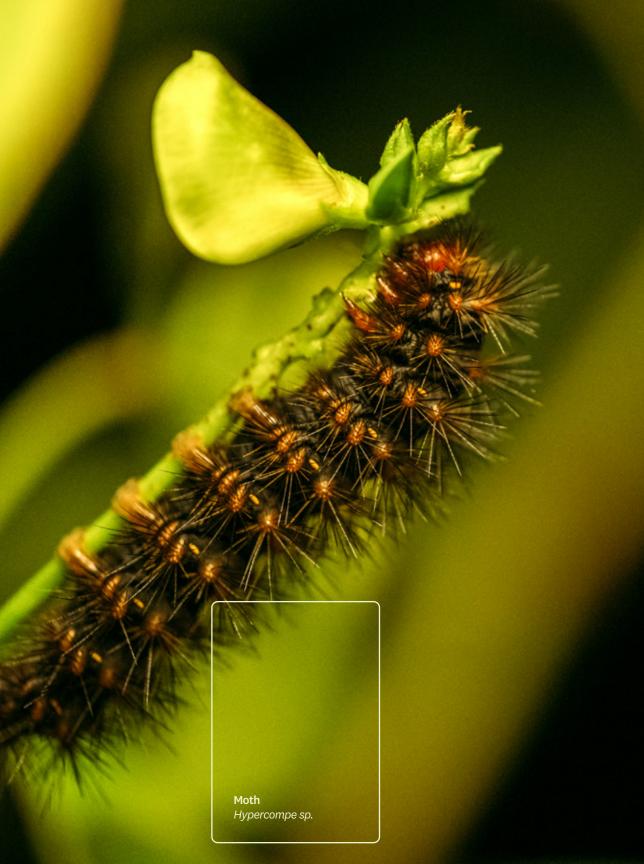
Annual Report 2023 For All Forms of Life para la Naturaleza paralanaturaleza.org







For All Forms of Life

Fernando Lloveras San Miguel, Esq. President Para la Naturaleza

In the face of a global climate crisis, extreme heat, hurricanes and ocean destabilization are realities that Puerto Rico and all other Caribbean islands are confronting with consequences beyond our imagination. Our coral reefs and coasts, our wetlands and rivers, our forests and all the biodiversity that has evolved within these ecosystems are experiencing life-threatening scenarios. And with this new reality, human life is under attack, and we do not know what is yet to come. Determination and action are our main tools to defend our quality of life.

At Para la Naturaleza, we are committed to continue engaging our allies, communities, and volunteers to protect and conserve ecosystems, promote biodiversity, and preserve the cultural and historical heritage of the archipelago. We are strengthening partnerships with the Caribbean region, understanding that regional cooperation enhances our ability to address environmental challenges, while recognizing that we are all part of a larger community that transcends Puerto Rico's borders.

Since 2013, Para la Naturaleza has played a key role in expanding land protection in Puerto Rico with the unique goal of making the archipelago become a functional and healthy ecosystem for all life forms. To date we have seen a significant increase in the percentage of protected land from 8% to 17%. In 2023 alone, the organization added 1,219.54 acres to the natural areas it protects, bringing the total to nearly 40,000 acres. By safeguarding these areas, we are making significant progress toward our collective goal of protecting 33% of Puerto Rico by 2033.

Given the damage we have done to our ecosystem over the past two centuries, Para la Naturaleza's role expands even further with its Reforestation Program. Started in 1989, we have increased citizen engagement in the recovery of our rich flora biodiversity. Through our annual La Siembra event, this year we conducted the largest tree distribution to date, with citizens showing up to take 42,066 trees across multiple locations, reflecting strong community involvement and a commitment to climate action.

Furthermore, to measure the impact of our land conservation and habitat restoration programs, we also conducted biodiversity inventories in 27 protected areas this year, discovering new species and expanding our knowledge of the islands' flora and fauna. Notable findings included a new population of the coquí llanero (Eleutherodactylus juanariveroi), Puerto Rico's smallest known frog,

with a metallic yellow belly and high-frequency call that makes it difficult to detect. In addition, a Puerto Rican boa (Chilabothrus inornatus) was found preying on a white-tailed tropicbird (Phaeton lepturus), a seabird that primarily inhabits the cliffs of Quebradillas. This was the first documented instance in the Caribbean of a boa preying on a seabird. These discoveries reinforce the importance of protecting, restoring and monitoring the natural habitats of Puerto Rico.

On the urban front, after a decade of community advocacy against plans to build a megastore in Ponce, we received a significant donation in July 2023: a parcel of land known as Bosque El Samán from a major pharmacy chain. This 1.5-acre forest, which includes 50-year-old trees such as the ceiba (Ceiba pentandra) and the samán (Pithecellobium saman), provides vital ecological services and supports a rich array of biodiversity. Para la Naturaleza is now working with the community to develop a participatory management plan to conserve and protect this important natural area.

Promoting a human footprint in harmony with nature has been another key effort of the organization since its inception. We have determined that achieving this requires a recovery of our society's ecological culture. Since the restoration of Hacienda Buena Vista in 1989, we have emphasized the importance of preserving the historical practices and knowledge provided by our cultural heritage.

This year, we initiated a project to document and dignify the history of enslaved people in the areas we manage, beginning with Hacienda La Esperanza in Manatí. This effort, in collaboration with local communities, has been supported by a grant from the National Trust for Historic

Preservation. The organization has also reviewed and digitized more than 5,000 historical objects and documents.

We also addressed the intersection of art, culture, and science through the exhibition Flora borinqueniana: Three Centuries of Botanical Illustrations. The exhibition highlighted the rich biodiversity of our native flora, drawing significant attendance both during its initial showing at the University of Puerto Rico's Mayagüez campus Art Museum and its subsequent display at the History, Anthropology and Art Museum of the Río Piedras campus.

During the year 2023, we completed the production of a short documentary film, Todavía la semilla (And Still the Seed), which gave artistic expression to our commitment to reforestation and highlighted the crucial role of the arts in education and conservation. We also had the opportunity to present this film at the Isla Verde Film Festival in Isla de la Juventud, Cuba, a festival dedicated to ecological issues. This presentation allowed us to share our conservation message with a broader audience and to engage with international perspectives. We also needed to delve deeply into our own institutional culture to reclaim our ecological values. Throughout 2023, Chilean researcher, curator, and Para la Naturaleza Art Resident Camila Marambio coordinated a series of workshops on ecofeminism for our staff. These workshops focused on the intersection of gender issues with sustainability and environmental justice. They were designed to integrate diverse perspectives and promote gender inclusion within our organization. By exploring the connections between gender equity and environmental stewardship, we aim to foster a more inclusive approach to our conservation efforts and ensure that our strategies reflect the diverse experiences and insights of all stakeholders.

Para la Naturaleza has also begun transforming its agricultural footprint.



This year, we launched a partnership with Desde Mi Huerto by establishing an organic seed bank, supported by a \$250,000 grant from Feeding America. This initiative aims to recover food sources and restore ecosystems during emergencies. Additionally, we started celebrating Puerto Rican cuisine and its connection to nature through local ingredients. Two successful culinary events were held at Hacienda La Esperanza on November 11 and virtually on December 11. These events highlighted the synergy between community, sustainability, and culinary excellence. Attended by over 300 people, the events featured renowned chefs and local farmers, showcasing the importance of proximity to our food sources in conservation efforts. Thanks to the support of donors, especially Oriental Bank as the lead sponsor, we raised \$318,359 to support our Solidarity Annual Fund and advance both our ongoing and new projects.

The Apiculture Manual, authored by biologists and beekeepers William Burgos and Stephanie Camacho from Para la Naturaleza, was presented on May 20 during the M'as $Cerc\alpha$ event at Hacienda La Esperanza. This manual highlights the crucial role of bees in agriculture and ecosystems and offers guidance on hive management. Following the presentation, the authors embarked on a local bookstore tour to raise bee awareness and connect with the beekeeping community.

The work continues. With the support of our team, communities, allies, and Board of Directors, we are moving forward. We are advancing in ecosystem conservation, habitat restoration, and the recovery of our ecological culture as we build a critical mass of citizens ready to tackle the climate crisis with commitment and determination. Only as a united community can we elevate our mission and forge a sustainable and just future for all forms of life.

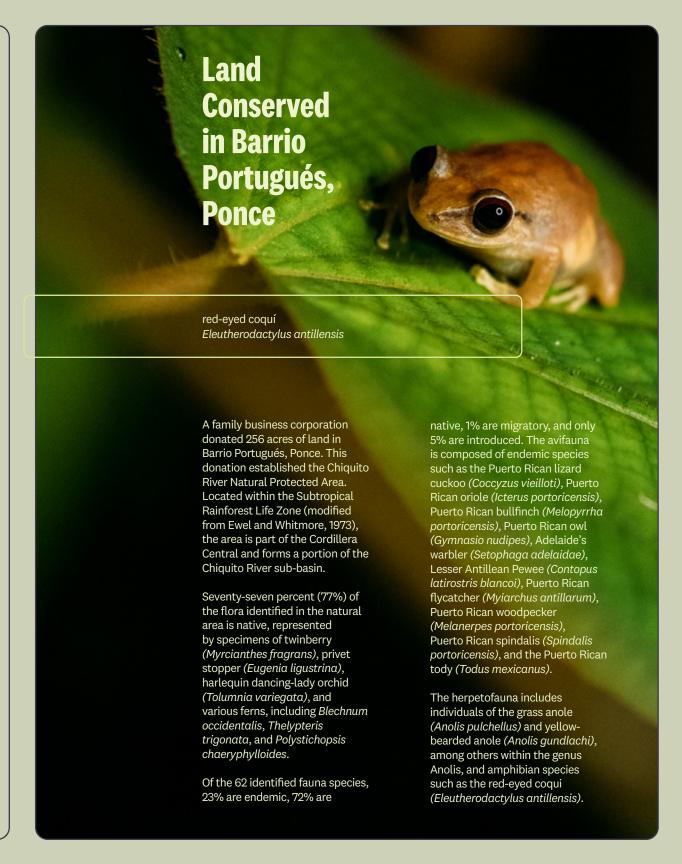


Bosque El Samán, an Urban Forest Is Born

The story of Bosque El Samán is one of triumph for those who fight for the conservation of the archipelago of Puerto Rico, where tenacity and community have played a key role in protecting nature. In July 2023, one of the largest pharmacy chains in Puerto Rico donated an important piece of land comprising 1.5 acres in the municipality of Ponce. The property is known as Bosque El Samán. This parcel had been the subject of environmental protests by the neighboring community for more than a decade. It was in danger of being destroyed due to plans to build another store in the municipality of Ponce. Some environmental groups in the country, including the community surrounding the property, fought hard to prevent, in several instances, the trees from being cut down. They even took legal action in court. The pharmacy company stopped its development plans and, in searching for a solution, decided to donate the property to a conservation entity, and their lawyers recommended Para la Naturaleza.

The forest consists of about thirty tree species and serves as a habitat for various butterflies and both native and migratory birds. In addition, it provides essential services to the community, including sequestering air and soil pollutants, stabilizing soils, recharging local groundwater, controlling floods, protecting against hurricanes, reducing soil erosion, and mitigating the risk of flooding.

The Southern Region and the Science, Education, and Volunteer Unit of Para la Naturaleza are developing participatory management plans with the goal of involving the community in creating the management plan for the protected area. To achieve this, meetings have been organized to discuss the history and uses of different areas. This process aims to build a shared vision for the space and actively involve the community in decision-making.



First Land Protection in Aguadilla

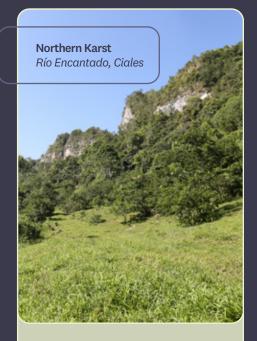
The Cordillera Jaicoa Natural Protected Area was created through a donation of four contiguous parcels of land totaling 251.05 acres. These lands are situated in the northern karst belt of Puerto Rico, characterized by underground drainage and limestone karst formations, including caves and mogotes. This natural area falls within regions recognized for their high ecological value, such as PRAPEC, Priority Conservation Area, and Key Biodiversity Area, the latter being internationally acknowledged as strategic sites for biodiversity conservation.

The natural area is located close to Cueva Cucaracha, an area of international conservation interest for bat populations such as ghost face bat (Mormoops blainvillei), Greater Antillean long-tongued bat (Monophyllus redmani), and the Puerto Rican common mustached bat (Pteronotus portoricensis). This area was highlighted by Bat Conservation International as an important conservation area.

Expanded Land Protection in Hacienda Buena Vista and Adjuntas

The donated land consists of 75 acres, and is located on the south-central slopes of the Cordillera Central, within the subwatershed of the Pastillo River. Approximately 80% of the classified flora is native, and 20% is introduced. Fifty percent (50%) of the avifauna is native, 55% is endemic, and 5% is introduced. Critical elements have been identified on the natural area, like the Puerto Rican vireo (Vireo latimeri), and a species considered vulnerable by the International Union for Conservation of Nature (IUCN) Red List. Map 33 has identified most of the protected area as having high ecological value.

At the end of the year, Para la Naturaleza protected two contiguous 120-acre parcels in Barrio Saltillo in Adjuntas through acquisition. The new addition expands our conservation efforts in this area, which began in 1970 with the first conservation easement donated by the Foreman family.



Ongoing Protection of the Northern Karst Region

A 121-acre property in the town of Vega Baja was donated to Para la Naturaleza. Approximately 83% of the classified flora is native, and 17% is introduced. One critical element, marunguey (zamia, Zamia erosa), has been identified. The avifauna is 30% native, 40% endemic, and 30% introduced.

Based on the Holdridge classification model, the natural area is located in the humid subtropical forest life zone (Miller and Lugo, 2009). It is part of the northern karst, and located within the watershed of the Cibuco River. The Strategic Conservation Model, Map 33, identified the land as having high ecological value.

Río Maricao Natural Protected Area has Expanded

We received a donation of 159.0757 acres adjacent to the Río Maricao Natural Protected Area. The land is a mosaic of forests that provide habitat for several species of conservation interest, such as the elfin-woods warbler (Setophaga angelae), Puerto Rican tanager (Nesospingus speculiferus), Puerto Rican bullfinch (Melopyrrha portoricensis), and the Spanish cedar (Cedrela odorata). It also provides a habitat for migratory birds such as the American redstart (Setophaga ruticilla) and the black-and-white warbler (Mniotilta varia). It also protects the waters that flow into the Rosario River.

The conservation of these lands will ensure permanent habitat protection for the elfin woods warbler (Setophaga angelae), which is protected under local and U.S. federal law.

Finca Arenales Alto in Moca is Now Protected

After several years, we were able to complete the purchase of two contiguous parcels of land totaling 200 acres in Moca. This acquisition helps to increase the amount of protected land in the northwestern karst of Puerto Rico. It will be the first protected area established by Para la Naturaleza in this municipality.

Six critical elements were observed in the now protected area: four plant species, one bird species, and one reptile species.

New Life Discovered

Protected areas are a key element in the conservation of nature and its ecological and cultural values. In order to protect biodiversity, Para la Naturaleza conducts annual rapid biodiversity inventories. These are defined by the collection of information by experts in a short period of time to assess species and ecosystems. The organization's conservation efforts are crucial in providing the data and insights needed to drive informed decision-making.

In 2023, rapid biodiversity inventories were conducted in 27 of Para la Naturaleza's protected areas. The work done by a team of six consultants reported the identification of:

6,683 plants

510 fungi

182 bryophytes

243 lichens

Rapid Acoustic Inventories of biodiversity:

21,525 1 minute recordings were analyzed at 2 protected areas: Río Maricao and Río Encantado

71 sne

species detected

record of the Bridled quail-dove (Geotrygon mystacea) in the Natural Protected Area Maricao River

5 species of conservation interest detected: coquí caoba (Eleutherodactylus richmondi), coquí melodioso (Eleutherodactylus wightmanae), Puerto Rican tanager (Nesospingus speculiferus), dwarf forest warbler (Setonbaga angelae)



Other important findings:

- In Quebradillas, the rare terrestrial fern restricted to the neotropics, Adiantum wilsonii
- The rare Anolis occultus and the rare neotropical shrub Schoepfia schreberi were documented for the first time in Para la Naturaleza

During 2023, three consultants collaborated with Para la Naturaleza to include species not well documented to date. Dra. Amelia Merced works with bryophytes: liverworts, hornworts and mosses, Dr. Joel Mercado works with lichens, and Kurt Miller works with fungi. Invertebrates are among the most diverse groups on Earth. In 2023, we documented several new species and records across different protected areas. In the Charco El Morón Natural Protected Area, we discovered the green flasher (Telegonus talus). Hacienda Margarita Natural Protected Area yielded four new butterfly records: the Caribbean swallowtail (Heraclides pelaus). Leptotes cassius theonus, Anaea troglodyta boringuenalis, and Hemiargus hanno watsoni. The drury's broken dash (Polites drury) has been recorded in the Río Encantado Natural Protected Area. In addition, our team observed the small, endemic and carnivorous land snail Laevaricella glabra, restricted to the northeastern region of Puerto Rico.

Several plant explorations were conducted between February and May 2023 at different natural protected areas. Some of the highlights are:

In the Western watershed, we documented the rare native herb Canna jaegeriana, the trees Ocotea wrightii and Siphoneugena dussii, and new individuals of the endemic Magnolia portoricensis. We also recorded several fern species such as Amauropelta germaniana, Hypolepis repens, and Rumohra adiantiformis,

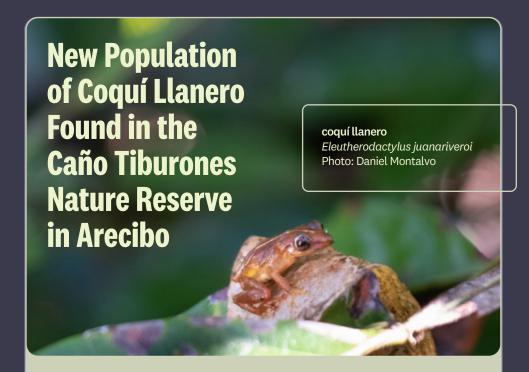
as well as the Odonata Scapalea frontalis. In addition, we recorded the fern Cyathea parvula; this species is endemic to the Greater Antilles.

In the Northern watershed, we observed several notable species, including trees of Ocotea cuneata, which is restricted to Cuba, Hispaniola, and Puerto Rico. We also discovered new populations of the rare, endemic fern *Anemia* portoricensis and the endemic herb Gesneria citrina, both of which are found only in the northern karst region. Additionally, we documented several new fern species, including Amauropelta sancta, Goniopteris abdita (a rare fern), Sphenomeris clavate, Hymenasplenium laetum, Pteris longifolia, Pteris hexagona, Pteris altissima, and Diplazium striatum, as well as the bromeliads Tillandsia setosa and Tillandsia boringuensis.

In the Metro-Centre watershed, we recorded the rare fern Adiantum macrophyllum for the first time. This is only the second record of this species within Para la Naturaleza's network of conservation areas. We also observed other ferns such as Polystichum rhizophyllym and Asplenium pumilum, as well as plants such as Tetrapterys inaequalis and Tillandsia variabilis.

The team concluded our preliminary findings with the discovery of the endangered and endemic tree Eugenia haematocarpa in a new locality. We also recorded several ferns there, including Diplazium cristatum, Pteris deflexa, Diplazium striatum, and Adiantum obliquum. Additionally, we documented the endemic tree Meliosma obtusifolia for the first time in Para la Naturaleza's conservation areas.

These findings underscore the importance of conserving land to protect biodiversity and the richness of ecosystems. They also provide crucial data for making informed conservation decisions.



The biologist, agronomist and Management Coordinator of the Northern Region of Para la Naturaleza, Alcides L. Morales Pérez, recently discovered a new population of the critically endangered coquí llanero (Eleutherodactylus juanariveroi) in Arecibo. This finding, which extends the known range of the species from Toa Baja to Arecibo, was confirmed and published in the scientific journal Herpetological Review. Previously, the coqui llanero was believed to only exist in the wetlands of Toa Baja. The species is now listed as endangered by the U.S. Fish and Wildlife Service (USFWS). which has designated critical habitat for its conservation.

Morales Pérez initially mistook the coquí llanero's call for a juvenile common warbler but recognized its uniqueness after consulting with colleagues at Para la Naturaleza. The discovery team, including Omar Monzón Carmona, Carlos Rodríguez Gómez, Daniel Montalvo Serrano,

and biologist Louis Santiago Brevan, obtained permission from the USFWS to photograph the specimens, which include eggs, adults, and a juvenile. This new finding represents the second known population of the species in Puerto Rico.

The coquí llanero, discovered in 2005 and named in honor of Dr. Juan A. Rivero, is the smallest frog species in Puerto Rico. It is characterized by its small size, metallic yellow belly, and high-frequency call, which makes it difficult to detect. The species lays very few eggs per litter and shows no parental care.

To protect and ensure the survival of this and other endangered species, Para la Naturaleza emphasizes the importance of conserving their habitats. The organization offers educational tours and volunteer opportunities to help the public engage with and support conservation efforts.



In 1990, Leonardo Morales recorded the first observation of a Puerto Rican boa (Chilabothrus inornatus) preying on a white-tailed tropicbird (Phaeton lepturus), a seabird that primarily inhabits the cliffs of Quebradillas. This was the first documented instance in the Caribbean of a boa preying on a seabird.

Recently, similar incidents prompted Alcides L. Morales, Para la Naturaleza's Northern Region Management Coordinator, to investigate these events further and explore their connection. This investigation led to the use of motion sensors camera traps to monitor nests, which revealed several instances of the Puerto Rican boa preying on the white-tailed tropicbird. Driven by these findings, Alcides consulted additional sources and colleagues to deepen his research.

This research highlights the critical need to protect the habitats of both the Puerto Rican boa and the white-tailed tropicbird. As endangered species found mainly in the cliffs of Quebradillas, they are supported by

conservation efforts from groups such as the Quebradilla Ecological League, led by Leonardo Morales, a colleague and friend of Alcides.

The results of his study were published in the October 2023 edition of Caribbean Naturalist. The article, titled "First documented predation event on white-tailed tropicbird, Phaeton lepturus, by the Puerto Rican Boa, *Chilabothrus inornatus*, in Puerto Rico," presents these observations as a "natural history" account, focusing on events occurring without human intervention or a formal scientific method.

Read the full article in the October 2023 Caribbean Naturalist. Access it here:

(PDF) First Documented Predation Event on White-tailed Tropicbird, Phaeton lepturus, by the Puerto Rican Boa, Chilabothrus inornatus, In Puerto Rico.

Collecting Seeds from the Tree Canopy



Manuel Mercado, Para la
Naturaleza's Safety and Security
Coordinator, and the team provided
training in tree climbing techniques
to the United States Forest Service
(U.S.F.S.) and to our organization
staff members. This training
enhances seed collection from the
canopy, which directly benefits
conservation efforts by increasing
the number of endangered trees
replanted in the forest.

Six Para la Naturaleza staff members have received specialized training, enabling them to participate in canopy seed collection, which begins each month. This training has attracted interest from peers across Latin America, who are adopting similar methods to collect and protect seeds that might otherwise perish on the forest floor. The skills acquired ensure that climbers can safely gather seeds without harming the trees or jeopardizing their own safety.

These sessions are a crucial component of Para la Naturaleza's conservation strategy, aimed at preserving the endemic and native flora essential for maintaining the islands' biodiversity.



On September 16, the International Coastal Cleanup organized by Scuba Dogs Society, took place, with over 4,000 volunteers removing 55,000 pounds of waste from 167 sites around Puerto Rico. Volunteers cleaned 3 reservoirs, 18 rivers, and 146 beaches.

More than 1,300 pounds of garbage were collected in a collaboration between the Guardarío organization and the Metro-Centro Region, with the participation of the community. Other natural protected areas managed by Para la Naturaleza also participated, including: Punta Cucharas, Ponce; Playa Canalejo, Fajardo; Río Usabón, Barranquitas; Medio Mundo y Daguao, Ceiba; and Playa Tómbolo, Manatí.

This cleanup effort was part of the first simultaneous mangrove planting and restoration event, named Mangletón, coordinated by Para la Naturaleza's Northern and Western Regions. Planting activities took place at Jobos in Isabela, Finca Nolla Nature Reserve in Camuy, and Hacienda La Esperanza Nature Reserve, with local partners such as Vida Marina, Coco PR, and Bosque de la Yaguaza.

In the Northern Region, 300 red mangrove seedlings were planted, and 119.4 pounds of garbage was collected. In the Metro-Centre Region, including the Usabón River, 909.62 pounds of garbage were collected. In the Eastern Region, 1,183 pounds of garbage were collected, and another 300 red mangrove seedlings were planted.

Mangrove forests are critical to sustaining coastal ecosystems. They provide refuge for a diverse range of species and serve as important barriers protecting coastal communities from hurricanes and sea level rise.

Expanding the Hiking Community

Para la Naturaleza's trails offer a direct connection with nature and play a key role in fostering Puerto Rico's growing hiking culture. In 2023, approximately 197,000 hikers and cyclists visited the organization's 10 trails. To better manage these popular natural spaces, Para la Naturaleza has installed eco-counters to collect visitor data, and enable informed trail management decisions.

The growing number of users underscores a strong desire to immerse themselves in nature.

This data highlights the increasing frequency of visits to these trails, which are sought out for enhancing well-being and connecting with nature. The initiative not only provides safe and accessible spaces for outdoor activities but also fosters community development and strengthens ecological awareness, ultimately inspiring further conservation efforts.



Promoting Sustainable Farming and Agroecological Practices

The Agroecology Program embodies Para la Naturaleza's commitment to aligning agricultural practices with ecological conservation. It emphasizes respecting biodiversity and maintaining ecosystem integrity while promoting regenerative agriculture models in Puerto Rico. This initiative aims to enhance the viability and resilience of agricultural systems in response to the growing challenges faced by traditional practices. The program supports various projects, notably the distribution of seeds and trees to improve food security and mitigate the impacts of climate change.

Through partnerships with Oriental Bank, the Liberty Foundation, and the Mariel Foundation, Para la Naturaleza is advancing the establishment of ecological model gardens in five Natural Protected Areas: Hacienda La Esperanza in Manatí, Cabezas de San Juan in Fajardo, Las Lunas in Caguas, Hacienda Buena Vista in Ponce, and Medio Mundo y Daguao in Ceiba. These gardens are integral to the ecological interpretation of these areas and play a central role in engaging volunteers and citizens.

Education is a cornerstone of Para la Naturaleza's conservation mission. For the Agroecology Program, this involves offering a wide range of public courses and making the expertise of partners and collaborators accessible to those interested in learning. In 2023, 22 courses and workshops were conducted for 1,471 participants in the living laboratories of our natural protected areas. These sessions covered diverse topics, including: Bio-inputs for Agroecological Soil Management and Pest Management; Management of the Vermiculture System, an essential bio-input for agricultural soils.

Also the courses covered:
Methodology for the
Production and Agricultural
Use of Biochar; Methodology
for the Remineralization of
Agricultural Soils; Methodology
for the Production of Beneficial
Microorganisms from Soils;
Agroforestry Systems with a Focus
on Tree Pruning; and a workshop
about Agro-Silvo-Pastoral Systems.



Building a Seed Bank for Preservation and Sovereignty

A major grant of \$250,000 from Feeding America has enabled Para la Naturaleza to partner with Desde mi Huerto, an organic seed production initiative based in Isabela, to establish Puerto Rico's first organic horticulture seed bank. This effort will be developed in a former public school near Desde mi Huerto's organic production farm, which is leased from the Municipality of Isabela.

This partnership aims to strengthen seed banks across Puerto Rico by emphasizing the Fitomejoramiento process—a meticulous seed improvement and selection technique carried out by experts. The initiative highlights the importance of open-pollinated seeds and solarpowered equipment to ensure an environmentally responsible approach. Para la Naturaleza and Desde mi Huerto are working to enhance seed banks to better prepare for natural events like droughts and floods, thus ensuring the recovery of food sources and supporting ecosystem restoration in the face of uncontrollable circumstances. The seed bank has achieved a milestone by protecting over 100 varieties of food, spice, and medicinal plant seeds, a significant step forward in preserving and enhancing agricultural biodiversity.

Enraizando: Public Education Continues to Grow its Roots

Education continues to be one of Para la Naturaleza's most important contributions to the sustainability of the islands. Through a growing network of partnerships with public Montessori schools, particularly the Instituto Nueva Escuela (INE), the organization is fostering nature-based educational experiences in 20 public schools. This collaboration emphasizes a holistic approach to nature stewardship from an early age, involving teachers, families, and students in the learning process.

Para la Naturaleza provides training for Montessori guides, integrates its interpretive content into school curricula, and supports various projects, including workshops, environmental monitoring, orchards, nurseries, and butterfly farms. A recent example of our dedication is the response to environmental damage at a school caused by the removal of tree canopies. Para la Naturaleza staff and community members intervened to restore the environment by installing

new planters and implementing creative solutions.

The Enraizando Program in 2023 made notable contributions to local schools. At Escuela Concepción Pérez in Ciales, it organized a workshop on bird identification and built benches for the green spaces. At Escuela Ernestina Bracero in Toa Baja, the project supported the school's nursery with germination tables and participated in planting and cleaning activities to enhance environmental stewardship.

Additionally, in 2023, a special tour for students of the Escuela Víctor Parés Collazo (INE) introduced them to the Flora boringueniana exhibition, some of whom experienced a museum visit for the first time and participated in watercolor painting activities. These initiatives highlight Para la Naturaleza's ongoing commitment to integrating environmental education with community engagement and creating meaningful learning experiences for students.





Nature Immersion Workshops

Para la Naturaleza's Nature Immersion Workshops (TIN, by its Spanish acronym) have been a central part of our educational outreach for nearly three decades, providing transformative experiences that deepen participants' connection with nature. Designed to educate children and youth about ecosystem conservation and biodiversity, these immersive workshops foster an ecological mindset through innovative learning methods.

Participants engage in hands-on activities in natural areas, helping them appreciate the importance of ecosystems while being directly involved with the environment. The program's approach empowers both children and volunteers and integrates a community-driven evaluation process to continuously improve its effectiveness.

The workshops are conducted in four key watersheds where Para la Naturaleza conducts conservation efforts. They are tailored to different developmental stages: Level 1 for children ages 9 to 12 and Level 2 for youth ages 13 to 17. Each session adapts to the particular features of the natural protected areas where they are held.

In 2023, the Nature Immersion Workshops involved 70 participants. These experiences have a profound impact on children and youth, as they not only enhance their understanding of nature conservation but also inspire a lasting commitment to ecological stewardship.

Volunteers Bring Energy and Creativity to Our **Ecosystem**

The involvement of communities and individuals is fundamental to our mission and crucial for achieving our conservation goals. Volunteers play a vital role by dedicating their time, energy, and efforts to support our teams and initiatives. Their commitment to protecting ecosystems makes them an integral part of our success—they are not just contributors but an extension of the organization itself. Their participation spans all areas of our programming and continues to grow as new generations become involved, thereby strengthening our ability to fulfill our mission.

In 2023, Para la Naturaleza trained 47 new Citizen Botanists who assist in the care and maintenance of tree nurseries and reforestation areas while learning about the conservation of Puerto Rico's flora. Ivette González Cancel, a volunteer at the Barranquitas Tree Nursery, shares her experience:

"The role of a Citizen Botanist has been immensely satisfying and enriching. It has deepened my connection to nature and expanded my knowledge. The experience is both relaxing and personally fulfilling."

Biodiversity Inventories for Federal Programs

The Joint Chief Project is a collaborative effort involving government agencies, the agricultural sector, land managers, and various public sector stakeholders.

As part of the Joint Chief Landscape Restoration Partnership, Para la Naturaleza has partnered with 12 organizations, including government bodies, agricultural entities, and land managers, to establish a conservation network with farmers in the Eastern Region. Our organization is a key player in the initial analysis of the biodiversity on agricultural lands. Teams from Para la Naturaleza's East and Metro-Centre Regions, along with Volunteer Program participants, employ the BioBlitz methodology to create species inventories on participating farms. This inventory provides an essential initial step for farmers to recognize the ecological value of their land and its role in biodiversity conservation.

To date, 27 farms have completed monitoring under the Joint Chief Program using the BioBlitz methodology.

As part of the Citizen Science program, the Metro-Centre Region held three BioBlitz events (one per month) at the following farms:

- Finca Canovanax, Canóvanas
- Finca De mi tierra a mi pueblo, Caguas
- Hacienda Montesol, Las Piedras





Flora borinqueniana: Three Centuries of Botanical Illustrations

The successful exhibitions Flora boringueniana: Three Centuries of Botanical Illustrations at the Art Museum of the University of Puerto Rico in Mayagüez and the Museum of History, Anthropology, and Art of the University of Puerto Rico in Río Piedras ran from February 28 to December 9, 2023. Curated by Dr. Eugenio Santiago, this pioneering exhibition in Puerto Rico traced the historical evolution of botanical knowledge from the 18th to the 20th centuries, integrating nature, science, and the humanities. It provided essential social, cultural, and political context for our botanical history.

Funded by a major grant from the National Endowment for the Humanities, the exhibition featured an educational program that included conferences, workshops, and tours guided by Para la Naturaleza environmental interpreters. Furthermore, the Southern and Western Regions organized special activities related to the exhibition, such as museum visits and accompanying workshops.

274 works exhibited

28 Lenders (PR, NY, PA, Paris, Madrid)

pieces from the Para la Naturaleza collection exhibited for the first time

8.552 visitors

Art Residency: At the Intersection of Science, Art, and Nature

Through a five-year, grant-funded pilot program, the Art Residency Program for Science, Art, and Nature Research has invited a select group of creative and scientific professionals to explore innovative approaches to nature conservation. Each year, an artist is hosted at the Las Lunas Natural Protected Area, where they are supported in their artistic, cultural or scientific endeavors with nature. This residency fosters ongoing collaboration with both local and international artists, and promotes networking and public education about the vital connections between science, art, and nature.

Camila Marambio, a Chilean researcher and curator with extensive experience in art and ecology, and founder of Ensayos,

a collective ecocultural research practice, joined Para la Naturaleza as an art resident. During her residency, she concentrated on ecofeminism, the rights of nature, and the importance of wetland ecosystems in Puerto Rico. Throughout her time with the organization, Camila organized several Olla Común events, where she shared her research and facilitated discussions about her work on the islands.

The culmination of her residency was marked by an event at the Antiguo Acueducto del río Piedras on December 1st, where she presented Sentipensar Ecofeministα, a deck of cards created in collaboration with designer Vanessa Colón Rodríguez and illustrator Anayarí Fernández Martín of the Editorial and Communications Division. This deck captures reflections from a series of reading groups and workshops on ecofeminism held during her residency.

The cards are available at Para la Naturaleza stores and offer a tangible representation of the insights and discussions from Camila's time with the organization, showing the team's deep commitment to ecofeminist theory and practice.





Todavía la semilla documentary Still image

Todavía la semilla

As Para la Naturaleza faces new challenges, it continues to explore innovative approaches to address them. An invitation from Dan Whittle and the Environmental Defense Fund to participate in the 1st Isla de la Juventud Environmental Film Festival in Cuba led to the creation of a short film highlighting the significance of reforestation.

The short documentary, Todavía la semilla (And Still the Seed), was written and directed by filmmaker Llaima Suwani Sanfiorenzo, and narrated by singer-songwriter iLe. The film reaffirms Para la Naturaleza's dedication to fostering an ecological culture in Puerto Rico. It features Puerto Rico's native and

endemic trees, and weaves a poetic narrative that connects the forest with the human history of the archipelago.

The film premiered to an enthusiastic audience on September 12 at the Raúl Juliá Theater in the Museum of Art of Puerto Rico. The screening was followed by a discussion moderated by Camila Marambio, the organization's resident artist, on the making of the film and the critical processes of germination, planting, and reforestation of native and endemic trees.

Todavía la semilla has been featured in the international film festival circuit and received partial support from the Environmental Defense Fund.

Research and Recognition of Afrodescendency: Revisiting the History

Our Afrodescendency visibility efforts represent one of the most crucial and sensitive cultural projects undertaken by Para la Naturaleza. Our teams have diligently documented the lives and histories of enslaved people who lived and worked in the areas now managed by the organization, beginning with Hacienda La Esperanza in Manatí.

Using historical records, archaeological evidence, and social research, we have uncovered and preserved the stories of those who lived under enslavement. This project is conducted in collaboration with the communities surrounding the protected areas and has been extended to Hacienda Buena Vista in Ponce. There, the findings have been integrated into the site's interpretive programs, enriching the visitor experience.

Internally, this initiative has provided an opportunity for Para la Naturaleza's staff to examine the legacy of slavery and systemic racism in Puerto Rico's history

and culture, and highlight the ongoing need for justice and healing. The project was supported by a grant from the National Trust for Historic Preservation.

Our team has reviewed and digitized over 4,500 documents from 1840 to 1910, including records of enslaved individuals, personal documents, complaints, contracts, and censuses. We have created a comprehensive database that includes detailed information about the enslaved people, such as their gender and place of origin.

This project influences how Para la Naturaleza updates and enriches its tours and visitor centers to include and address the complex issues of slavery and its legacy. Under the leadership of Ivonne Sanabria and Soraya Serra, this initiative has enabled our staff to confront the historical impact of slavery and systemic racism. It also underscores the need for ongoing efforts in the area of racial equity and justice.

255

People identified as enslaved in Hacienda La Esperanza

13

Family units identified using records only from 1870

Hacienda La Esperanza Manatí, Puerto Rico



Más Cerca Para la Naturaleza

Más Cerca Website

In 2023, Para la Naturaleza launched *Más Cerca* (Get Closer), a new institutional campaign that embodies our vision and mission. This initiative highlights the significance of deepening our connection with nature and emphasizes the role of community involvement. At its core, *Más Cerca* revolves around six key actions that invite individuals to actively support and engage with our organizational goals:

- Conserve
- Learn
- Reforest
- Collaborate
- Recreate
- Donate

Más Cerca is:

- A call to action to conserve the islands of Puerto Rico
- An invitation to citizens to get closer to natural areas to learn about the importance of their cultural, ecological and social ecosystems
- An opportunity to share ecological knowledge and tools
- A proposal to join us and collaborate in conservation efforts

The *Más Cerca* campaign kicked off with two major public events to introduce the mission to the

community. The first event, held on Earth Day, April 22, took place at the Antiguo Acueducto del río Piedras. This event featured workshops, tours, and exhibitions, allowing visitors to explore the protected area, learn about the history of the waterworks, and understand the conservation efforts aimed at preserving the last meander of the Piedras River. As one of Para la Naturaleza's eight visitor centers, the Antiguo Acueducto del río Piedras emphasizes the importance of riparian protection for ecosystem health. The event highlighted the significance of the river and the historic site's role in conservation.

The second event celebrated International Bee and Pollinators Day

on May 20 with a community day at Hacienda La Esperanza Nature Reserve in Manatí. The day included workshops, exhibitions, tours, and activities for children, offering a comprehensive learning experience.

In addition to the Más Cerca campaign and its events, Para la Naturaleza's volunteer activities and self-guided trails exemplify the accessibility of nature and its role in promoting overall health and well-being. These events highlight Para la Naturaleza's commitment to the conservation of both protected natural areas and historically significant sites of ecological and cultural importance.

Apiculture Manual Launched

Written by Para la Naturaleza biologists and beekeepers William Burgos and Stephanie Camacho, the Apiculture Manual, published under the organization's editorial brand, was officially launched on May 20th during the Más Cerca event at Hacienda La Esperanza. This educational resource highlights the critical role of bees in our ecosystem and provides guidance on beekeeping management. Following the launch, the authors embarked on a book tour of several local bookstores to raise awareness about the importance of bees and engage with the apiculture community on the islands. Expanding the reach of this vital message will require dedicated collective effort.



Overtures: Culinary Compositions

As part of the *Más Cerca* (Get Closer) campaign, Para la Naturaleza's Development team hosted a two-night event celebrating Puerto Rican cuisine in harmony with nature. This initiative emphasized that by connecting with our food, the land it comes from, the people who cultivate it, and the chefs who prepare it, we not only build closer relationships with each other but also deepen our connection to nature itself.

The annual fundraising event, held on November 11 at Hacienda La Esperanza Nature Reserve in Manatí, was a success. It highlighted the synergy between community, sustainability, and culinary excellence. Attendees enjoyed a culinary journey with featured chefs (pictured from left to right):

- Chef Francis Guzmán (Vianda)
- Chef Maria Grubb (Underground Dining Club)
- Chef Gabriel Hernández (Verde Mesa)
- Chef Martín Louzao (Cocina Abierta)
- Chef Lucía Merino (Lucia Patisserie)
- Chef Natalia Vallejo (Cocina al Fondo)



Bringing **Nature to the Public Agenda** Smooth-billed Ani Crotophaga ani Para la Naturaleza works on many fronts to conserve the islands of Puerto Rico. Public policy is a crucial area where we engage with ongoing legislative efforts and policymakers. Proactively monitoring and responding to policies, measures, and legislative bills is essential for addressing conservation issues in Puerto Rico. Our legal team diligently tracks, evaluates, and responds to opportunities to enhance the functionality and health of the islands' ecosystems.

Puerto Rico Planning Board Joint Resolution

In March 2023, Para la Naturaleza stated its opposition to the 2022 Joint Regulation (RC-2022) providing a comprehensive roadmap for addressing the deficiencies found in the proposed regulation. An edited excerpt of attorney Fernando Lloveras San Miguel opinion published in Metro newspaper is cited below:

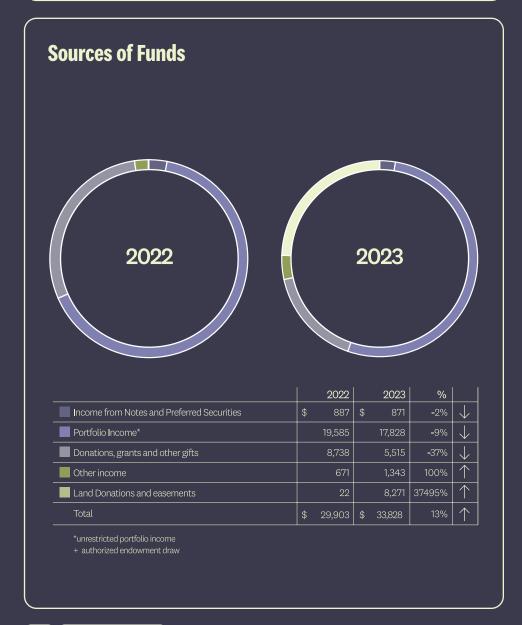
"Para la Naturaleza categorically opposes the approval of this Joint Regulation as proposed. RC2022 is, to underscore, a regulation and not a plan, therefore it cannot replace or amend the Puerto Rico Land Use Plan, nor can it amend other plans, such as the Sector Plan of the Cialitos River Natural Reserve or the Rincón Territorial Plan, to give just a few examples.

The proposals presented in this regulation would have adverse effects in natural areas such as the El Yunque National Forest, the Guánica Dry Forest and in all the natural reserves and forests of the islands of Puerto Rico. As drafted, RC2022 would allow new uses without due evaluation of their impacts on ecosystem resources,

opening the way for the granting of a whole series of permits to develop just by requesting, without going through the consultation and corresponding evaluations. Our cities would also suffer. They would lose habitability by allowing non- residential uses such as short-term housing, hotels, hospitals, condominiums, and pharmacies in our parks and amenities areas. These are just a few instances in which RC2022 eliminates essential analyzes of impact on the quality of life of human beings."

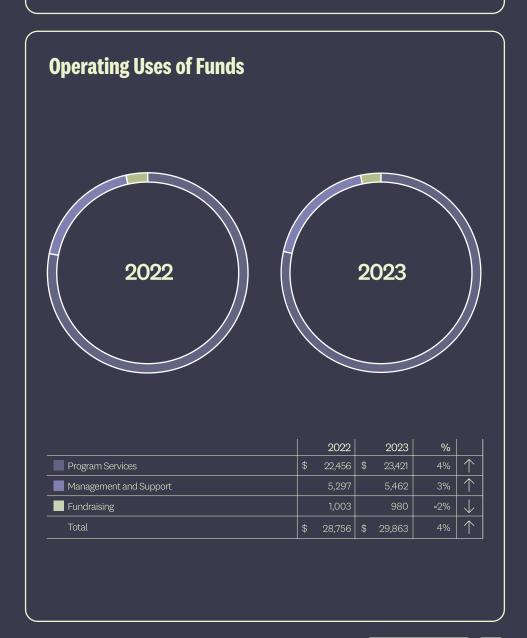
After the publication of this article, the Puerto Rican Supreme Court ruled that the 2020 Joint Regulation was unconstitutional, a case filed by Para la Naturaleza due to serious due process violations. The ruling was unanimous, with one abstention; it also created confusion since the Planning Board reacted by stopping all permit processes instead of just reverting to the previously valid regulation. Later, it filed a reconsideration and continued the permit processes. Para La Naturaleza engaged immediately in the public debate after the ruling, indicating the need to follow the correct public participation processes and noting the lack of diligence of the Planning Board to enable public participation.

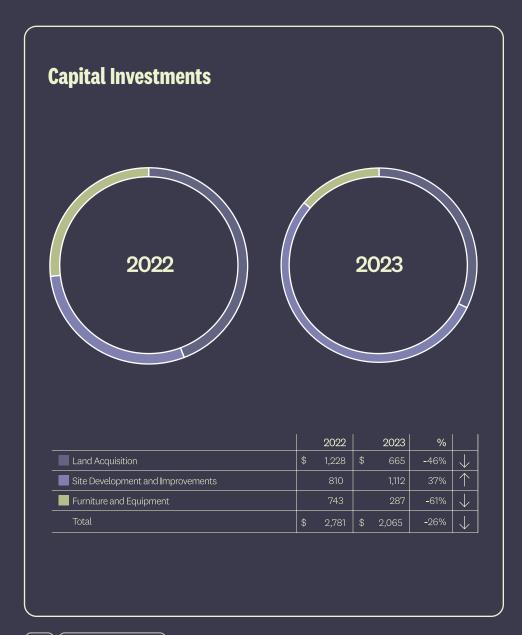
Selected Financial Information

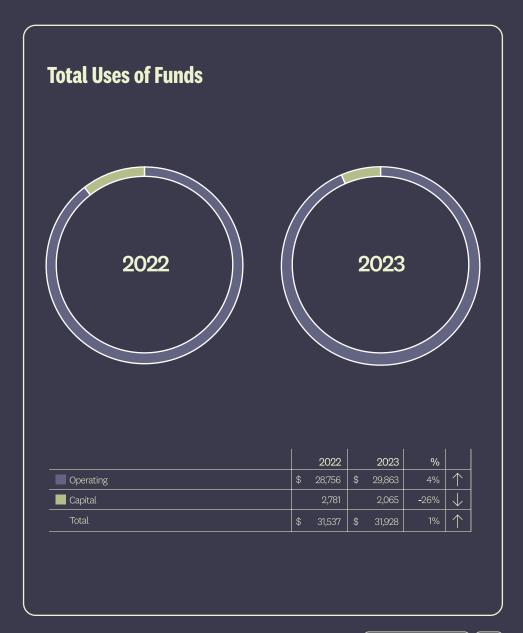


Para la Naturaleza received significant land donations in 2023. Despite the volatility in financial markets, the organization maintained a stable income compared to 2022 and continued to align with its intended use of funds. Below is a summary of

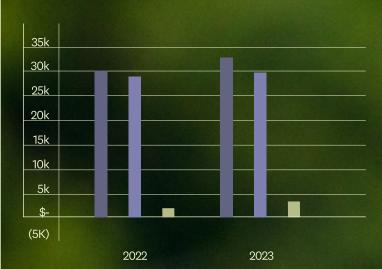
selected financial information for Para la Naturaleza. These figures are based on audited financial statements, though they do not encompass the entirety of those statements. All amounts are presented in thousands ('000).











	2022	2023	%	
Operating Revenues	\$ 29,903	\$ 33,828	13%	\uparrow
Operating Expenditures	28,756	29,863	4%	\uparrow
Excess Funds	1,147	3,965	246%	\uparrow



Friends and Supporters

\$1.000 - \$4.999

7.29 Events Aida Cardona Alchemy Park LLC **Alight Solutions Andrew Darrell** Anne Huber

Anonymous

Anonymous Anonymous Anonymous

Anonymous Anonymous

Anonymous Anonymous Anonymous **Anonymous**

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B. Fernández & Hnos.

Banco de Alimentos de Puerto Rico. Inc.

Barbara N. Fuldner

BASF Agricultural Products de PR

BirdsCaribbean

Blas Fonalledas & Diana Pérez

Brandon Diggs Brian Williamson Candy Bobonis Roig & William Lockwood Benet Casillas, Santiago & Torres, LLC Cooperativa de Seguros Múltiples

Cristina Ángeles Colón David B. Hartwell

Doug Hargrave & Nina Wang

Dr. Alan del Castillo Dr. Natalio Figueroa Ruiz

Dulce Caña EcoEléctrica **Edward Wall**

Enrique Alejandro & Jannette Silva

Familia Martínez Galib

Fernando Lloveras San Miguel, Esq.

& Michy Marxuach

FMC Agricultural Caribe Industries LTD Francisco X. González Calderón

HUB International PR

I.M.R. Contractors & Services Inc.

Jacqueline Ballester

Javier L. Bonnín Orozco & Cheryl Hartup

JLMS Consulting Engineers, PSC

John King

Juan Carlos Benítez

Kristin Ehrgood & Vadim Nikitine

Laura Millon

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Loren Ferré Luis R. Pérez Giusti

Mapfre Praico Insurance Company

Margarita Garriga Mario R. Nevárez Alonso

MetaTree

New York League of Conservation Voters

Nicholas J. Moore One Tree Planted Pablo Venegas Colón PepsiCo Puerto Rico Pfizer Pharmaceuticals, LLC

Plaza Las Américas Popular Auto

Rebecca Marvil & Brian Smyth Robert Iscaro & Fernando Martínez

Scott Jackson Semillero Partners Stephani Ramijanc Tanus Saad Marrero The Carter Family The Clip Family

The Sterling and Francine Clark

Art Institute **Thomson Reuters** Ultimate Solutions Corp. V. Suárez & Co., Inc. **VMware Foundation** Walmart Puerto Rico

Wells Fargo

Wildlife Conservation Society William Berry & Lisette Núñez

Yaskira & José Ordeix

Fundación Luis Miranda Casañas, Inc.

\$5.000 - \$9.999

INFIVA Amgen Puerto Rico

Anonymous M Salomé Galib & Duane McLaughlin Anonymous Kathleen Merlo & Dan Ilisevich

Anonymous Megan Parisi Anonymous Michael Bannett Carmen Báez **Model Offset Printing** Christopher Cain Puerto Rico Farm Credit

Cvnthia Curtis Nelson Richard Barna

Destilería Serrallés, Inc. Shi An

Familia Crespo USIC Gabriel Mandujano Viatris

Howard Partridge William Richardson

\$10.000 - \$99.999

Andrew Broz Joaquín B. Viso & Olga Lizardi

Arbor Day Foundation Brendan Kissane Burger King Charities

EMÁJYN

Charities Aid Foundation America

(CAF America) Clinical Scholars Dan & Devon Morehead Dr. Peter Castro

Edwards Lifesciences Foundation Environmental Defense Fund Flamboyán Foundation

Fulcro Insurance

Fundación Ángel Ramos Fundación Plaza del Caribe

Fundación Segarra Boerman e Hijos, Inc

Hispanic Federation

Interlink

Jacob & Heather Huck

James and Barbara Cimino Foundation

Kristin Choi

The Herrans Group

Land Trust Alliance Liberty Puerto Rico **Liberty Foundation** Lilly del Caribe, Inc. Merrill Lynch Metropistas Motorambar Park Foundation

Peter & Kathryn Scudera PR Textile Recycling

PRxPR

SC Johnson de PR. Inc.

Stephanie Lee

The 20/22 Act Society The Hodges Family

TOTE TUCOOP

\$100,000 +

Anonymous

Oriental

Popular

Puerto Rico Department of Natural and Environmental Resources

Telemundo

U.S. Fish and Wildlife Service

Para la Naturaleza (Annual Report 2023)





Hispaniolan Mimic-White Dismorphia spio