OUR IMPACT
2021 ANNUAL REPORT | PUBLISHED APRIL 2022

Celebrating
10 YEARS in the SAVA
35 YEARS in Madagascar
55 YEARS in Durham
In 2021, the Duke Lemur Center celebrated its 55th anniversary. Although founded with a singular research-focused mission under the direction of Drs. Peter Klopfer and John Buettner-Janich, today the DLC is a global hub of lemur conservation, lemur management and care, and education and outreach as well as a center of scientific discovery.

Never in its history has our mission been more urgent or amplified. Throughout 2021, despite the challenges of a lingering global pandemic and significant financial strains, the DLC—through innovation, sacrifice, and sheer determination—maintained the programs critical to our mission: studying and protecting the lemurs of Madagascar.

As you will see in the pages that follow, our team did a remarkable job. I could not be more proud or grateful for their enduring passion and resilience.

In 2021, we initiated multiple new endeavors to better secure the DLC’s future, with equal accessibility being a top priority. A task force was formed to address the barriers that prevent or discourage participation in our programs from underrepresented members of our community. The committee identified several new initiatives, the first of which, paid internships, begins in this spring.

Continuing the theme of looking to the future, I’m excited about the completed construction of the Anna Borruel Codina Center for Lemur Medicine and Research. Generously donated by a Duke alumnus, the Borruel Center enhances veterinary care at the DLC and provides a state-of-the-art teaching facility for vet students in the US and around the world. Its advanced research facilities support complex projects such as hibernation, microbiome, and genomic studies, and allow us to pioneer innovative, non-harmful research with the potential to benefit both lemurs and humans.

Beyond our operations in Durham, the DLC-SAVA Conservation Project celebrated its tenth year in Madagascar. Despite being unable to travel to Madagascar, DLC conservationists Charlie Welch and Dr. James Herrera worked virtually with on-the-ground Project Coordinator Lanto Andrianandrasona to keep our conservation programs running at full throttle. Their collaborations with CURSA, the local university of the SAVA, extended the DLC’s reach and provided opportunities to partner with and teach the next generation of Malagasy leaders in science and conservation.

We’re excited by what we’ve accomplished in 2021, and we look forward to the opportunities that 2022 will bring to better share our mission and message with the world. Of course, none of this would have been possible without the generosity, loyalty, and dedication of our staff, volunteers, and donors.

On behalf of all of us at the Duke Lemur Center, thank you for your continued support!

GREG DYÉ
Executive Director
Duke Lemur Center
BUILDING A BIGGER ARK
Sifakas arrive in the UK and Germany

With 25 individuals housed onsite and 37 others on loan to zoological partners, DLC cares for the largest colony of critically endangered Coquerel’s sifakas in the world, outside their native Madagascar.

These animals are a genetic safety net for their species: an “ark” to protect them from being lost forever should their wild counterparts become extinct.

That’s why in 2021, after nearly five years of planning, eight beloved sifakas were flown from the DLC to three zoos throughout the UK and Germany. These eight individuals will play a key role in expanding the genetic safety net for their species from a US-led initiative to a new global collaboration.

TRAINING HUSBANDRY BEHAVIORS FOR STRESS-FREE CARE

The animal care team conducted 4,059 training sessions with the lemurs to condition a variety of behaviors, including voluntary kenneling, ovulation cycle checking, Frontline® application, ultrasounds, scale training, blood draws, mouth exams, collaring, tail shaves, and urine collection. Not only does training reduce handling and stress, it is also an excellent form of enrichment. The animals’ participation is 100% voluntary.

SUPPORTING POSITIVE ANIMAL WELFARE

A new enrichment data collection system, which supports a holistic view of positive welfare, was developed and is currently being tested and transitioned into use by our animal care team.

NOCTURNALS

A BOOM YEAR for Fat-tailed Dwarf Lemur Births

Six bouncing babies were born in 2021, following seven infants in 2020—a record number of births in the last two decades.

FIRST BUSH BABY BIRTH at the DLC in Two Decades

Bush babies aren’t lemurs, but they are prosimians—the same group of primates that includes lemurs. The DLC houses a small number of bush babies to allow for better comparative research. In 2021, we welcomed our first bush baby infant in over 20 years.
MICROBIOME RESEARCH

DLC scientists demonstrated that using innovative technology to sequence plant genes in lemur feces would provide a reliable method for diet reconstruction of wild lemurs via non-invasive sampling.

FUNDING FOR MALAGASY, STUDENT RESEARCHERS

The Aid for Articles program, developed by DLC scientists Marina Blanco and Lydia Greene, provided funding and mentoring to five early-career Malagasy researchers to assist in the completion of their research through publication.

The DLC awarded $30,000+ in research support through the Director’s Fund to six projects led by graduate students, and nearly $2,500 through the Molly Glander Fund to five undergraduate student projects.

WELCOME CHRIS WALL, PH.D.
New DLC Assistant Director of Research

"From an early age, I wanted to be a scientist. But I didn't take a straight path from college to getting a Ph.D., which gave me the chance to explore different jobs.

"In graduate school, I was captivated by the complexity of anatomy and by the power of the theory of evolution by natural selection. I decided to work on answering questions about how function connects anatomy and evolution.

"I have worked in the Department of Evolutionary Anthropology at Duke since 1994, first as a postdoctoral researcher, and later as a research professor. Many of my favorite research experiences developed in unexpected ways, and I encourage students to embrace opportunities even if they don't seem to fit perfectly with their career plans.

"Throughout my career, my research included work at the Duke Lemur Center; and I’ve been a Senior Research Scientist at the DLC since 2018 (after retiring from my faculty position in Evolutionary Anthropology). In 2021, I was appointed the DLC’s Assistant Director of Research. This is my post-professor dream job because of its focus on STEM education and grant design and writing across all departments, which gives me an opportunity to contribute to the research, education, and outreach missions of the DLC."
RETURN OF ONSITE VOLUNTEERS

After pausing all volunteer and student programs in 2020 due to the pandemic, the DLC resumed onboarding of new Technician Assistants and Education Department volunteers in the summer of 2021. Duke work-study students returned to in-person work that fall.

ASSISTANCE WITH RESEARCH

Increased in-house research allowed many of our Technician Assistant volunteers to serve as research assistants on projects focused on topics such as the gut microbiome and lemur parental investment.

DID YOU KNOW...

The DLC’s Students Projects program connects students with volunteer, work-study, research, and internship opportunities at the DLC. Students have gone on to study primates in the most remote parts of the world; to become veterinarians and zookeepers; to serve in the Peace Corps; to attend graduate school; to teach environmental education; and so much more.

7,569
HOURS OF SERVICE DONATED
BY DLC VOLUNTEERS IN 2021
**FROM COLLECTION TO MUSEUM**
The Division of Fossil Primates Prepares to Relaunch as the DLC Museum of Natural History

In preparation to introduce the general public to the DLC’s fossil collection, an exhibit space was designed and created to tell the story of lemurs and humans.

Scheduled to open in 2022, the exhibit—including the educational signage pictured to the right—and tour are a collaboration between the fossil team and the education and outreach team, especially Fossil Preparator and Graphic Designer Karie Whitman and Tour Designer and Lead Educator Alanna Marron.

As part of this project, a mural was painted on the back of the Division of Fossil Primates (DFP) building that features the creatures in the collection that are too big to put on display in our current space. Future visitors can now size themselves up next to elephant birds, gorilla-sized lemurs, and ancient elephants.

**NEW RESEARCH**

Fossil Lab researchers used DLC fossils to document a massive extinction 33 million years ago that dramatically impacted primate evolution in Africa, worked on new fossil sites in Kenya, and documented the arrival of different groups of mammals in Africa.

**GRANT FUNDING**
The National Science Foundation and Institute for Museum and Library Services each awarded the DFP grants to support fossil preparation, scanning, storage, and record digitization to keep our important, delicate specimens safe for future research.

**ARCHAEOLEMUR JAW**

Scanning this subfossil jaw allows us to digitally isolate baby teeth and developing adult teeth, so we can explore how these extinct monkey-like lemurs grew up.
CELEBRATING 10 YEARS IN THE SAVA

10 years ago, after considering numerous regions in Madagascar as an additional DLC conservation project site, the SAVA of northeastern Madagascar was identified as best suited for a variety of reasons. The SAVA’s exceptionally high biodiversity, its remaining forests, its local openness to community-based conservation, and the lack of presence by other conservation organizations made it a logical choice.

Thanks to the DLC-SAVA team, the first 10 years of the project have seen extraordinary progress through an array of community-based activities:

- **2,600+ teachers** have been trained in teaching environmental education
- **Tens of thousands of trees** have been planted at sites throughout the region
- **Fish-farming ponds** have been established in villages to reduce bushmeat hunting
- **Workshops and trainings** have successfully promoted sustainable agricultural techniques
- **1,000+ fuel-efficient stoves** have been distributed, reducing the use of wood and charcoal
- **Multiple lemur survey missions** into the forests of the COMATSA, a very important corridor of forest between Marojejy National Park and Tsaratana, have provided valuable information on lemur abundance in that important remote protected area
- **Numerous collaborations** have been established with other NGOs and with CURSA, the regional university, to amplify the impact of the project’s mission and to make the decade ahead even more impactful

COLLABORATION WITH CURSA

The DLC-SAVA Conservation project’s collaboration with CURSA, the regional university of the SAVA, has been greatly expanded through 2021. By engaging students/faculty in various project activities, from lemur survey missions to sustainable agriculture, all involved benefit and conservation goals are supported.

REGENERATIVE AGRICULTURE

General Mills awarded the DLC-SAVA project a one-year grant to expand its regenerative agriculture project activities. A primary cause of deforestation/forest degradation in Madagascar is the traditional shifting agriculture technique (also known as slash and burn) used by Malagasy cultivators. With a steadily growing population, more natural forest is disappearing each year. In the SAVA region, approximately 20% of the natural forest cover has disappeared in the past 20 years.

Regenerative agriculture involves working with and caring for soil in a way that it can be used repeatedly, creating permanent areas of cultivation instead of continually cutting forest, growing a crop for a year or two, and moving on. Protecting and managing soil in a sustainable way is essential for slowing forest destruction.
FIELD TRIP FUND

The DLC created a field trip fund to send students in Durham and in Madagascar on field trips with DLC educators. This initiative was inspired by DLC donors Ned and Sandy McClurg, who provided funds to sponsor field trips (including bussing costs) to the DLC for Durham Public School students.

LONG-TERM PARTNERSHIP WITH LOCAL SCHOOL

The education team began a collaboration with the science department at Lakewood Montessori Middle School, launching a pilot program for long-term partnerships with local classrooms. The success of this program led to a two-year grant from the North Carolina Museum of Natural Sciences to keep this program going.

PROGRAM EVALUATION AND COLLABORATION

The DLC joined the ImpactNC initiative, building a community of collective evaluation and collaboration with 53 other environmental education centers across North Carolina.

TOUR PROGRAMS REOPEN

In June, after being closed to the public for 15 months, the DLC’s onsite tour programs were reopened. Thanks to the help of more than 25 new docents—many of whom attended a special training the first week of June (above)—we educated 4,000 visitors in five months.

FREE ONLINE RESOURCES

During the downtime created by the pandemic, the education team enhanced the DLC's free resources available to educators.

See the full-length virtual tour, presentations, and more at:

LEMUR.DUKE.EDU/VIRTUAL
Between July 1, 2020 and June 30, 2021, the DLC received just over $3 million in gifts. This included a $2 million gift received from an anonymous Duke alumnus toward the construction of the Anna Borruel Center for Lemur Medicine and Research.

Noteworthy gifts with significant impact on the expansion of the DLC’s conservation work in Madagascar were generously made by Bob and Sue Knox, General Mills, and Darren and Julie Harkness Cooke ’94.

**NEW IN 2021**

» The DLC shared its first annual impact report and hosted its first Spring Director’s Forum via Zoom as a new way to connect in a meaningful way annually with our donors and close friends around the world.

» Five new new legacy gift commitments were received from Ashley Wallace Adams ’93 and John Kinnett Adams, Sr.; Lexi and Mike Gordon ’76; Dr. Naomi Lynn Nelson ’88; and two couples who wish to remain anonymous. We’re honored to be formally included in their estate plans, and we welcome them to our Legacy for Lemurs Society.

» The Circle of Life, a new addition to the DLC’s Giving Societies, was founded to recognize donors whose lifetime cumulative gifts and commitments, including bequests to the DLC, exceed $10,000. These donor’s names will be listed to the wall in the Lemur Landing gift shop.

» A plaque was installed on the summer tour path in recognition of a generous gift from Jane Harmeling McPherson ’52 and her family, in memory of David McPherson and Dr. Harry T. McPherson, M.D. ’46.

» Naming gift opportunities were established for the Borruel Center, and new major and principal gift options were added for donors to consider as ways to make a significant investment in the DLC’s future impact.

**THANK YOU TO ALL OF OUR DONORS!**

DLC giving traditions stayed strong as our friends and followers responded generously to our requests for support, including the Love and Lemurs video valentine, Stay Away 5K, Giving Tuesday, holiday appeals, and Mission: Madagascar event and online auction. Special thanks to our 2021 Mission: Madagascar sponsors!

While the DLC does not provide a public list of Giving Society members in this impact report, our Director’s Society members, Circle of Life members, and corporate donors of $5,000+ are listed on the wall in the Lemur Landing gift shop. All giving society members are eligible for benefits as our way to thank them for their generosity.
2021 IN REVIEW
FINANCIAL OVERVIEW

FISCAL YEAR 2021 INCOME

- Duke University Support: 58%
- DLC Endowment Income: 5%
- Philanthropic Giving: 11%
- Animal Care: 36%
- Education Programs: 8%
- Research and Student Engagement: 8%
- Conservation Programs: 6%
- Development/Fundraising: 6%
- Grants and Contracts: 11%
- Tours, Merchandise, Rentals, and Fees: 4%
- Maintenance, Grounds, and Utilities: 13%
- Administration and Operations: 13%
- Division of Fossil Primates: 8%

FISCAL YEAR 2021 EXPENSES

FISCAL YEAR 2021 FINANCIAL SUMMARY

<table>
<thead>
<tr>
<th>Income</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duke University Support</td>
<td>$2,325,726</td>
</tr>
<tr>
<td>DLC Endowment Spendable Income</td>
<td>$215,084</td>
</tr>
<tr>
<td>Philanthropic Giving</td>
<td>$854,937</td>
</tr>
<tr>
<td>Tours, Merchandise, Rentals, and Fees</td>
<td>$162,809</td>
</tr>
<tr>
<td>Grants and Contracts</td>
<td>$432,005</td>
</tr>
<tr>
<td><strong>Total Income</strong></td>
<td><strong>$3,990,561</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Expenses</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administration &amp; Operations</td>
<td>$520,764</td>
</tr>
<tr>
<td>Animal Care</td>
<td>$1,436,412</td>
</tr>
<tr>
<td>Maintenance, Grounds &amp; Utilities</td>
<td>$734,341</td>
</tr>
<tr>
<td>Education Programs</td>
<td>$300,606</td>
</tr>
<tr>
<td>Research &amp; Student Engagement</td>
<td>$337,022</td>
</tr>
<tr>
<td>Conservation Programs</td>
<td>$323,135</td>
</tr>
<tr>
<td>Development/Fundraising</td>
<td>$155,862</td>
</tr>
<tr>
<td>Division of Fossil Primates</td>
<td>$321,683</td>
</tr>
<tr>
<td><strong>Total Expenses</strong></td>
<td><strong>$4,129,825</strong></td>
</tr>
</tbody>
</table>

NET SURPLUS/DEFICIENCY FOR THE YEAR:
-$139,264
THANK YOU

INFANTS WERE BORN IN 2021, REPRESENTING DIFFERENT SPECIES. CURRENTLY, A TOTAL OF DIFFERENT SPECIES AND

210813209 ANIMALS RESIDE AT THE DLC.