

### IN THIS ISSUE

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Kate McMonagle\*\* РНОТО

CONTRIBUTIONS Amanda Austin\*\* Lauren Barczak\*\* Jennifer Klotz\*\* Jim Smigie Vicki Villanova Carlee Wadding\*

### WRITERS

Amanda Austin\*\* Vatsala Bais Lauren Barczak\*\* Karen Galanaugh Amy Haddock\* Jennifer Klotz\*\* Julianna Mills Mark Shafer\*\* Carlee Wadding\*

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- \* Delaware State Parks Staff Member
- \*\* Delaware Zoological Staff Member

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### On the Cover: Bushmallow

Bushmallow, a San Clemente Island goat, joined the goats in our barnyard on November 10, 2022.

The conservation status for San Clemente Island goats is listed as Critical by The Livestock Conservancy. This is the most threatened ranking for domestic animals in the US with less than 200 annual registrations. The breed is fine boned and deer like compared to

other domestic breeds. They were found in the Channel Islands off the coast of California around 1800. Originally believed to be of Spanish origin, genetic testing has shown they are genetically distinct and their origin is still under investigation.

### New at the Zoo

By Carlee Wadding, Animal Keeper



Meet Ande, a one and a half-year-old Southern pudu! Ande joined the Brandywine Zoo in the end of November all the way from the Woodland Park Zoo in Seattle, Washington. Ande joins our two-year-old female, Clover. Clover and Ande have been getting to know each other and you can see them together in their habitat.

BRANDYWINE

Ande came to the Brandywine Zoo on a recommendation from the Species Survival Plan (SSP). Zoos that are accredited by the Association of Zoos and Aquariums participate in Species Survival Plan to help grow the population of threatened or endangered animals. Animals that are a part of SSP's are matched together for genetic diversity.

Southern pudu are the world's second smallest deer and are native to Argentina and Chile. Their diet consists of fruits, nuts, fungi, and a lot of vegeta-

tion. Male and female pudu look very similar, the males have small antlers which are dropped in the winter. Ande has already dropped his antlers for the year, but you can tell Clover and Ande apart by the color of their fur. Ande has more of a red color to his fur, while Clover is browner.

Ande's personality has begun to come through as keepers spend more time with him. He is an outgoing, curious and adventurous pudu who has quickly stolen the hearts of staff and guests. Clover and Ande are almost always together and the keepers are excited to see Clover and Ande get to know each other and hopefully be able to contribute to the Species Survival Plan.

# Little Nature Explorers

By Amanda Austin, Early Childhood Educator

Little Nature Explorers is a nature based preschool program where children ages 2-5 and their guardians learn about animals and nature through on-hands activities. Classes take place in the Zoo's Nature Playground, where children can crawl through a tree tunnel, balance over a



Circle Time

path of tree stumps, and look for birds through a bird blind. Each session is 5 weeks long, with families attending either Sunday or Wednesday mornings. Classes take place at 9:15am, so attendees can enter the Zoo before opening!

Our current session is the tenth iteration of this class, and even though the weather is chilly, we are still exploring outdoors! Winter sessions have some weeks with a non-animal theme, such as weather or animal adaptations. We just finished our "weather" week, where we made a windsock out of toilet

paper tubes, tissue paper, and string, and used fine motor skills to clip clothespins to images describing the weather. During circle time, we sang "What's the Weather?" and read one of my favorite storybooks about a bear in hibernation and his friends who enter his lair to escape the blizzard outside. At the end of class, we talked about our favorite kind of weather, how we stay comfortable in cold or hot weather, and how our amazing Zookeepers care for our animals year-round!



North American Porcupine - Juniper

Little Nature Explorers creates an environment where children utilize natural items for play, ask questions and work through answers, socialize with other children, and engage with the natural world around them. We have been fortunate to have many families return for multiple sessions, and we have even needed to start a waitlist because classes regularly sell out! I am extremely proud of the

program's popularity and growth over the last year, and always look forward to Sunday and Wednesday mornings, because I know I get to see the amazing families and children that have made this program so special.

Interested families can head to our website under our "Learn" tab to find the Little Nature Explorers page for more information.



Porcupine Art



# Delaware Zoological Society Executive Director Message

Looking back on 2022, there was a lot to celebrate and appreciate here at our little gem of a zoo. First off, we were awarded a reaccreditation from the Association of Zoos and Aquariums (AZA). Not all zoos pass the test and meet the standards of the AZA. It's a big deal! It demonstrates that we are committed to providing excellent care for animals, a great experience for our visitors, and a better future for all living things. Less than 10% of animal exhibitors in the US are accredited. The Brandywine Zoo is the only animal care facility in Delaware to meet the rigorous AZA accreditation standards.

We continued to see our attendance soar. We welcomed over 50,000 guests last year. Our education department provided programming that reached an additional 16,000 people. Our popular Sip & Stroll evening events continue to sell out as did Brew at the Zoo (our major fundraising event) which will again be held in June this year. We welcomed thousands of children and young families to this year's Boo at the Zoo and Family Fun night. In fact, we are adding a second

Since we opened our new Madagascar exhibit, the second phase of our 3 phase Zoo Re-imagined expansion campaign, we've seen zoo attendance increase by 19%. We can't thank you enough for all your support.

Family Fun night this year due to its popularity.



Mark Shafer



Speaking of our Zoo Re-imagined campaign, we are in an aggressive fundraising mode looking to raise the necessary dollars to allow us to expand our footprint and create a new entryway complete with a South American wetlands habitat featuring Chilean flamingos, sloths, toucans and pudu. You'll be hearing more about this exciting new project this year. We can use your help in reaching our financial target. If you're interested in hearing more and/or contributing to our efforts go to the website www.brandywinezoo.org and click on the "Our Zoo Re-imagined" tab at the top of the page. All donations,

large and small, will help us reach our goal.

Finally, thanks to everyone who helped us reach our goal of raising \$45,000 in our annual fundraising drive last year. Fundraising is the lifeblood of our organization. Every event we run from Sip & Strolls to Brew at the Zoo is designed to help us meet our financial needs and obligations. We cannot run our operations and programming without the generous support of

our members and friends.

You all mean a great deal to us. We love what we do and, based on the response from the community, you love what we do too.

Thank you.

# Friday, June 9 5:30-8:30pm.

Tickets on sale soon at www.brandywinezoo.org/brew-at-the-zoo

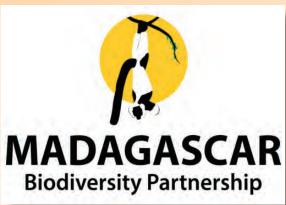


# DZS assists reforestation efforts in Madagascar

By Lauren Barczak and Karen Galanaugh

A grant from the Delaware Zoological Society Conservation Grant program at the Brandywine Zoo provided funds to support a pilot project focusing on alley cropping reforestation in Kianjavato, Madagascar in collaboration with Omaha's Henry Doorly Zoo and Aquarium and the Madagascar Biodiversity Partnership. The Brandywine Zoo is home to three of the nine species of lemurs found in this

is home to three of the nine species of lemurs found in this critical area in Southeastern Madagascar.



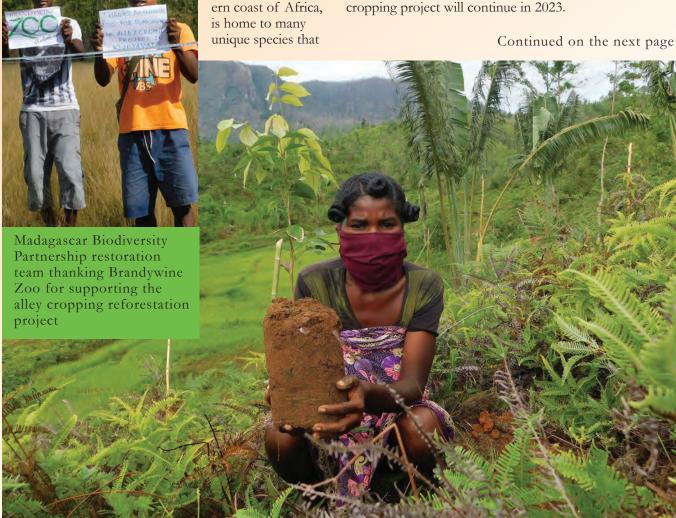
The island nation of

Madagascar, located

off the Southeast-

can't be found anywhere else in the world. The forests that many of those species call home are threatened by habitat loss, which is fueled by deforestation and overharvesting. This habitat loss on Madagascar threatens not only the long-term survival of endemic wildlife such as lemurs, but also the millions of people that rely on subsistence farming and the forest's resources.

The Delaware Zoological Society contributed funds to purchase necessary tools such as camera equipment, seeds, and reusable fabric pots for sapling trees. The Madagascar Biodiversity Partnership planted its five-millionth tree this year, and the next phase of the alley cropping project will continue in 2023.



Sapling trees are raised in reusable fabric pots and then planted by the reforestation team. DZS Conservation Grant funds were used to transport pots like these to Madagascar.

Alley cropping is a method of agriculture that creates alleys between rows of trees and allows for crop plants to be harvested among cover crops. This method of agriculture benefits farmers who rely on harvesting crops while reforesting areas of native trees. By planting fast-growing trees for harvesting in spaced rows followed by slower growing native trees, farmers can harvest plants with less risk to the young native forest that provides essential resources to both local communities and wildlife.

Since it's official founding in 2021, the Delaware Zoological Society Conservation Grant program at the Brandywine Zoo has donated more than \$7,000 to partners for projects around the world. Other partners have included Kaminando Habitat Connectivity Initiative in the Guna Yala Indigenous Territory in northeast Panama who's

work focuses on applied sciences and traditional ecological knowledge to help save Jaguars and their habitats. Funds this past year also supported Conservation Fusion in Andavakoera, Madagascar, supporting conservation though community income generation and education. Local recipients have included the Delaware Council of Wildlife Rehabilitators and Educators, as well as the Brandywine Zoo's Field Conservation work.

To learn more about these and other conservation projects that received funds from the Delaware Zoological Society or to get involved by volunteering or donating to the zoo's conservation efforts, visit the Conservation section on our website.

### www.brandywinezoo.org



Seedlings being transported to the alley cropping trial site on Tsitola Mountain in baskets made from locally sourced materials.



Jackson, a Reforestation Assistant, holding a camera purchased using conservation grant funds.



Black-and-White Ruffed Lemur photographed by Vicki Villanova.

# Conservation Leadership Academy

By Julianna Mills, Member of CLA

I joined Brandywine Zoo's Conservation Leadership Academy as a junior in high school, a time in my life when I knew I wanted to work with animals but was unsure of how. Before I participated in this program, I had experience with nature through volunteering and veterinary internships; however, I had doubts about how feasible a career in conservation was. In hopes of learning more about this field of study, I joined this program to also expand my overall understanding of environmental conservation through the variety of topics covered in it.

One of my favorite aspects of this academy was the ability for members to use our mentors as outlets for curiosity. After the sessions, our mentor, Jen Klotz, always encouraged us to ask questions about topics to further our comprehension of real-world issues. After, we were pushed to innovate and work together to create improved solutions to dilemmas we encountered during our activities. This built a positive culture that allowed us to develop the practical and interpersonal skills necessary for a career in conservation in the future. As for practical skills, some we learned about were population sampling methods, ways to reduce

our carbon footprint, and how to build structures that benefit the ecosystem, like when we built rain barrels out of garbage cans.

Each session offered both hands-on and purely informative activities, with many offering the guidance of professionals who gave first-hand insight regarding the conditions of their fields in conservation. From

Indigenous conservationists to service animals who track invasive nutria scat, we learned about ecological topics that had never even occurred to me before. We also got to visit places like the DE Recycling Center and DE Center for Horticulture which helped us realize the true impact these establishments have on society.

As each member was provided grant funds to pursue a project that benefits the environment physically or through advocacy, I created my project to do both. With the guidance of Jen, I developed reusable and

recyclable seed pods that contain a variety of Pennsylvania's indigenous pollinator plants. My main goal for this project was not only to help spread awareness for the decline in natural flora and the effects this has had on insect populations but also to physically among the people of my community in Pennsylvania. On each seed pod sold, there is a barcode linked to an infographic describing the plight as bees and the impact of vegetative decline on the world as a whole.

spread these seeds of pollinators such

I look forward to using the knowl-

edge and skills I have attained from this program to work with others to help conserve the lives of endangered animals across the world. Overall, the Conservation Leadership Academy has encouraged us to expand our perspectives and develop our passions for multiple forms of ecological preservation.



# My Experience with the Conservation Leadership Academy

By Vatsala Bais, Member of CLA

My experience at Brandywine Zoo started with my involvement with the Conservation Leadership Academy. The program started in mid-February and I was extremely excited to get involved. I have always been an advocate for the environment but I never felt like I had a way to get more involved and learn more about the topic so I had very high hopes for the program. I can safely say that I was not let down.

I should start by explaining more about the details and structure. Every month, we had a theme and through these themes, I feel that my perspective on conservation changed. My favorite theme of the entire program was "Indigenous Voices in Conservation". This session was the most important to me because

as a person of color, I feel as if we are spoken over on the topics we are informed on. In this session, we talked about indigenous representation in the media and its correlation with society's view of minorities in general. I can admit, I had no idea about the effects of indigenous tribes on modern-day conservation and ecological knowledge. The main thing which impacted me during this session was watching the video "A Conversation with Robin Kimmerer". Robin explained her book "Braiding Sweetgrass" and I can admit that this video and the book changed my entire perspective. After this session, I listened to an audiobook version and I can admit that it influenced my entire belief in human interactions with the earth. The book is so beautifully written and it makes me view our earth differently. I always thought that earth is a separate non-living being from us humans but her book has truly impacted my vision into believing that we are one with the earth.



The major topic we covered in CLA was conservation. Through the program, I felt like I learned more about our environment and how to care for it. I was introduced to the Plastic Free Eco-Challenge, which helped me understand the effect my family and I have on the environment and how we could remedy that.

CLA impacted me personally through my year-long project. It was based around local ponds and lakes in the Delaware Area, mostly focusing on White Clay Creek. The creek has always been a personal location for me since my family and I try to go there regularly to either hike or walk our dog. I was shocked when I found out that White Clay Creek had so much pollution. The main form of pollution is water runoff from

our lawns that can be infused with pesticides and other harmful chemicals. It harms the animals which use the creek as their habitat as well as the residents who use the creek as drinking water. White Clay Creek is drinking water to around 130,000 people in Delaware alone. I was horrified by this statistic and how there was no action being taken. I decided to set up a virtual plant sale near my area and in areas neighboring White Clay Creek. I created flyers and, with the help of my parents, distributed them digitally. Through my project, I sold tulip bulbs that can be planted in the winter and sprout up in the spring. The basis behind my project is a "Future Rain Garden". This garden can soak up runoff from lawns and reduce the amount of pollution in local creeks or bodies of water. After this project, I can ensure that White Clay Creek is safer every day. Through CLA, I feel like my perspective has changed on the way I view the environment and my knowledge has increased.



The red-footed tortoise is a species of tortoise from northern South America. These medium-sized tortoises generally average 30 cm (12 in) as adults, but can reach over 40 cm (16 in). They have dark-colored, loaf-shaped carapaces (back shell) with a lighter patch in the middle of each scute (scales on the shell), and dark limbs with brightly colored scales that range from pale yellow to dark red. nized and fixed in 2017. Population density ranges from locally common to very scarce due in part to habitat destruction and over-collection for food and the pet trade.

Thank you for supporting our special events and programs! Here are some highlights from this past fall and winter at the zoo.







# Santa at the Zoo!!!

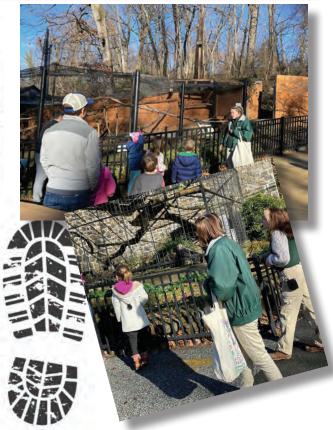
# Noon Year's Eve!!!



# First Day Hike!!!







# Thanks for your support!

Thank you to our 2022 event sponsors for their generous support! If your organization would like to sponsor an event at the zoo, please email events@brandywinezoo.org















### New Committee Looks Back on First Year

By Jen Klotz, Community Engagement Lead

In late 2021 Brandywine Zoo formed a committee to focus on and help guide the organization's efforts toward Diversity, Equity, Accessibility, and Inclusion (DEAI). This initiative allows us to better align with the Association of Zoos and Aquariums vision in these subject areas. Just as higher standards are placed on animal care at facilities under their accreditation, so too are the overarching principles of inclusion for every guest. Setting a list of goals early helped us clarify a path for 2022 and we were quite successful! A fun and ongoing project is that of gathering staff and volunteer pictures for our Virtual Directory. This resource has been added to onboarding procedures as a way to familiarize new hires with fellow staff. As a live document anyone can then access it for reference at any time. Another internal goal of the committee was to survey employee satisfaction which provides valuable insight about our operations and allows staff to be heard. Questions were divided into three categories: social and work environments, and the organization as a whole. Feelings of value, growth opportunities, and our role in contributing to the zoo's mission are some examples of the information we gathered from the majority of staff. Leadership then received the results and have been assessing paths forward.

The committee was proud to revitalize Sensory Hour during select mornings at the zoo. This is

Welcome to the Barnyard

an opportunity for guests of any age with sensory needs to enjoy the zoo prior to public opening, when it is calm and quiet. A tactile table and sensory bin allowed for additional engagement.

We held this twice in the fall and plan on more in 2023! Pride Day was a huge success this year, far exceeding our goal of a 10%



increase over 2022 attendance. As such, there are no plans of removing it from the calendar so join us again in June. Decorations, vendors, activities, keeper chats, and creature features are for all to enjoy as ALL are welcome. Assisting with attendance on days like this or any other, is our partnership with the Access DE and EBT programs. Show your card and valid ID so up to four people can get in at only \$2 each! Free programming such as Story Time, Keeper Chats, and Creature Features are then available, depending on the time of year. We're proud to say the goal of increasing guest use of these programs by 10% over last year was also exceeded.

Finding a solution to the topic of making our signs more inclusive was an ongoing challenge, but then we had an epiphany! What about Google Translate? Armed with the app on our phones, we

canvassed the zoo pointing them at any sign we found. It worked! Bathrooms, check. Map, check. Exhibits, check. If you are more comfortable reading your native language, please download and use the app seen on this page to translate our signs. There are over 100 languages available! If the print is too small to read on your phone, there is also a speaking option and a voice will read the words aloud in your chosen language.

DEAI Committee members are very pleased with our success this first year and are currently discussing and creating goals for the year ahead. More information about options you may have when arriving and on grounds can be found online at

www.brandywinezoo.org/visit email the committee about anything using the address deai@brandywinezoo.org.

### Rossifari Podcast features The Brandywine Zoo

By Amy Haddock, Assistant Curator/Registrar

On December 12, 2022, the Brandywine Zoo's Assistant Curator/ Registrar did an interview with Jon Rossi for his podcast, Rossifari. The podcast covers Jon's journeys to zoos, aquariums and rescue facilities across the country and beyond! Each week, Jon shares an interview with zoo keepers, as well as incredible photos of the animals he meets. Jon's animal endeavors go beyond

simply loving zoos and aquariums. His passion lies in conservation of endangered species and spreading the message of these important missions to as many humans as possible.

Jon and Amy visited the red panda exhibit and discussed the history of red pandas at the Brandywine Zoo and the importance of the conservation of this species. The Brandywine Zoo acquired two female red pandas, Gansu and Meridoc, in 2014. They were sent to other institutions when they became sexually mature on a breeding recommendation from their Association of Zoos and Aquariums Species Survival Plan (SSP). The zoo then welcomed Mohu and Sherman, in 2018. Sherman got his name because he is built like a tank and Mohu means fuzzy in Mandarin. Mohu keeps to herself more so than Sherman. Sherman is more curious about what his keepers are doing and is more motivated to do training sessions.

Red panda populations have declined approximate-



ly 50% in the last 20 years. It is estimated that as few as 2,500 remain in the wild; however, there are worldwide efforts to help save this endangered species, like The Red Panda Network and the AZA's Species Survival Plans.

Sherman and Mohu are not on a breeding recommendation through their SSP, however the Brandywine Zoo participates in the program to

ensure genetics are diverse across the species when animals are moved around to help repopulate the breed.

The zoo helps endangered species through Species Survival Plans, by exhibiting the animals to educate the public about issues and how to help. Specifically, to helping red pandas, the Brandywine Zoo will take part in the Red Panda Network's Red Panda Day on September 16, 2023.

The best way humans can help endangered species is to reduce consumption of products that rely on packing and sourcing materials from the habitats of those species, and look for products that are sustainable. Smartphone Apps exist that allow consumers to scan products when shopping to find the right products.

You can learn more about Rossifari & Jon Rossi, his podcasts, and more at rossifari.com

Mark your calendar for this season's Sip & Stroll evening events at the zoo!



5-7pm on May 11 June 22 July 20 Aug 17 Sept 21



On behalf of all of us at the Delaware Zoological Society of the Brandywine Zoo, Thank you for your generous donations to our Annual Fund in 2022!

Your donation directly helps us inspire love of animals and the desire to protect them with innovative programs for children and adults; supports outreach and local conservation programs; and funds the magic behind the scenes that makes the Brandywine Zoo a special place.

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Delaware Zoological Society supporting the BRANDYWINE ZOO





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The Department of Natural Resources and Environmental Control is committed to affirmative action, equal opportunity and the diversity of its work force.

> ACCREDITED BY THE **ASSOCIATION** AQUARIUMS

Please let us know when you move; don't miss special invitations and Zoo News. Email to memberships@ brandywinezoo.org or call 302-571-7788 Ext. 215.

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### **Upcoming Events & Programs**

Scout Day ......March 26

Sensory Hour ......April 8, May 13

Scout Night!

Clues at the Zoo ......April 15

Earth Day / Party for the Planet.....April 22

World Bee Day......May 20

Plant Sale .......May 27, 28, 29

Sip & Strolls......May 11, June 22

Brew at the Zoo.....June 9

Pride Day.....June 24

Little Nature Explorers – Ongoing Sessions





For More Information, visit www.brandywinezoo.org