



# NaturePhile

Written/Published by: Your Trust-ed Staff

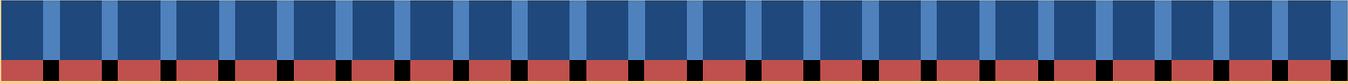
Volume #19/Issue #3 2021

The Balsam Mountain Trust inspires people to be responsible stewards of the natural and cultural resources of the Southern Blue Ridge Mountains through education and conservation leadership.



As naturalists, Trust staff are constantly amazed at the different types of wildlife found on the Preserve. The Trust Party that took place on 2 October bore that premise out in magnificent fashion (the clothing notwithstanding!). On the left is one Doug Carroll and a new species to the Preserve, an Ollie Orangutan. They are seen here with BMP owner Donna LeMoine. Doug's presentation with his friend was really creative and funny. The two species to the left have yet to be taxonomically classified but we're pretty sure they are (left) a Nicole Cook (former AmeriCorps service member) and an Elise Gray (volunteer and Trust intern). These two were photographed by a critter camera located at the Summit House the night of the Trust Party. The Trust Party raised a new record total for this event. The silent and live auctions and the business sponsors helped us realize how much people care about this organization.

In this issue: [What I'm Thinking About](#); [From the Trailhead](#): [And the Answer Is: Humility](#); [The Trust Party](#), [Anonymous Donor Issues Next Challenge](#); [Education Mewsings](#): [Welcome Your New Wild Neighbors](#); [AmeriCorps Update](#): [Our New AmeriCorps Service Member](#)



Here's

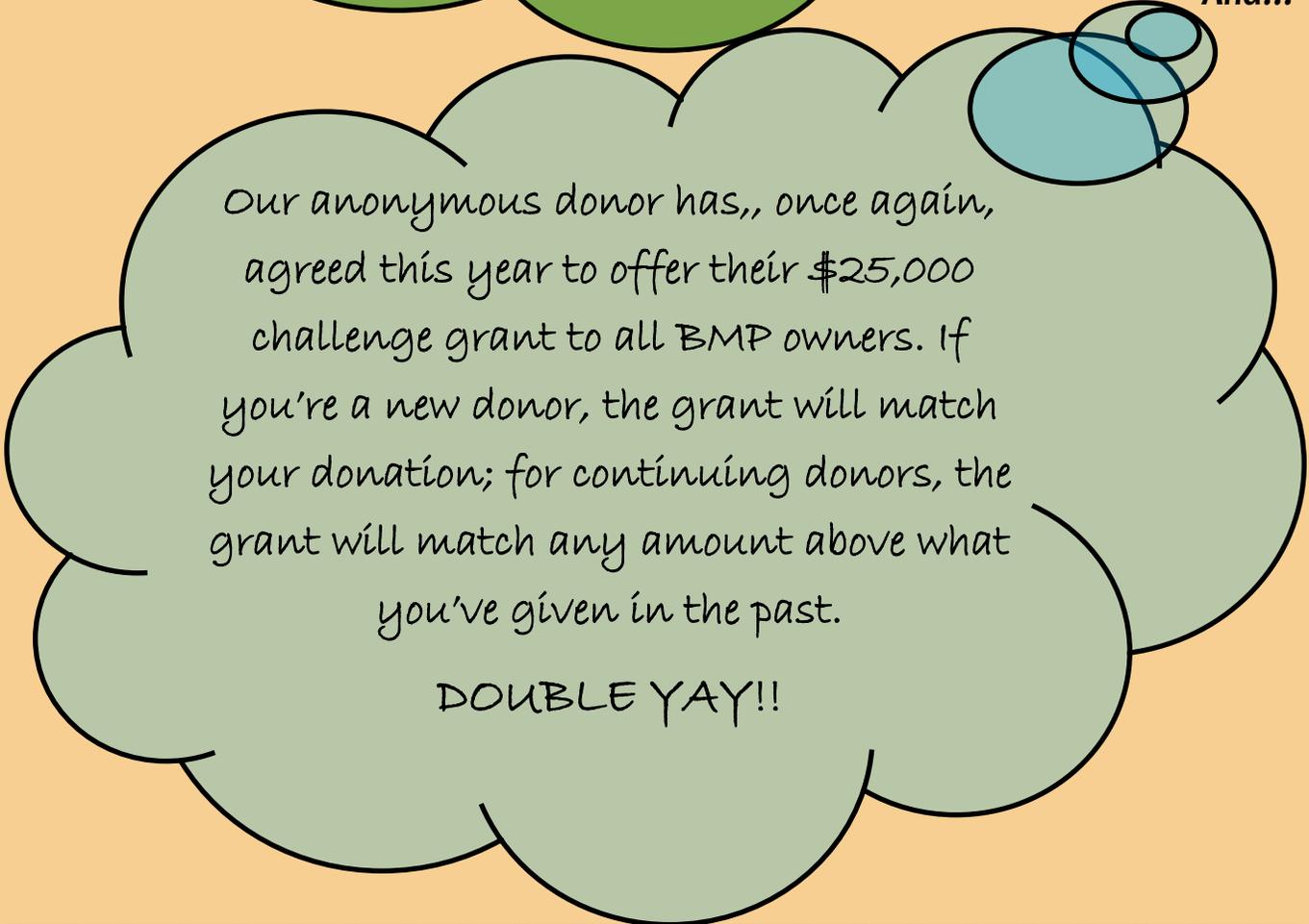
what I'm thinking...out loud!



Thank you to all BMP owners and friends for your generous support of the Trust at this year's party, which translates to us being able to continue to try and meet our mission!

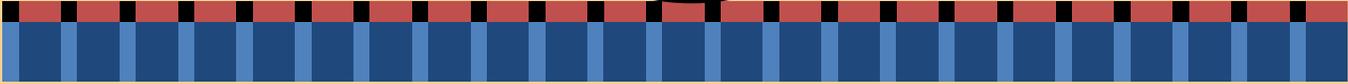
YAY!!!

And...



Our anonymous donor has,, once again, agreed this year to offer their \$25,000 challenge grant to all BMP owners. If you're a new donor, the grant will match your donation; for continuing donors, the grant will match any amount above what you've given in the past.

DOUBLE YAY!!





## **From the Trailhead:**

By Michael Skinner, executive director

### **And the Answer Is: Humility**

**What is the best trait a person can have (and express) (IMHO) when confronted by an enormous outpouring of community support for the nonprofit with which you're affiliated?**

**This support is now, more than ever, really important, if for no other reason than it provides your Trust team with the opportunities to continue bringing you data-driven, science-based information to**

**help provide the tools necessary to bring awareness to the most important environmental**

**issues facing the human race. Chief among them is our continued ability to live healthy lives and, for the systems that support all life on Earth, to remain vibrant and viable.**

**We are so very fortunate to enjoy the bounties available to us, but we often employ an "out of sight, out of mind" state of consciousness that leaves us in the dark about the consequences of our actions that might threaten to unravel the intricate and delicate balance of the planet's life support systems. Case in point, the ivory-billed woodpecker, a bird that has had a dedicated flock (sorry!) of Holmesian-type ornithologists looking for it since it was listed as endangered in 1967 but has not had a confirmed sighting since 1944!, was just proposed for delisting because it is now considered extinct.**

**(Please see the next page of NaturePhile for the most recent species listed for delisting due to extinction.) Now, with this news, it's incumbent upon this writer to offer some conservation successes. Did you know there is an organization named the Endangered Species Coalition? Please go to this website:**

**<https://www.endangered.org/12-conservation-success-stories-for-endangered-species-day/> This is**

**where you'll find the good news about the efforts being extended to bring back species from the brink. Chief among them are the American bald eagle. And is this our national symbol!**

**As stated in the last NaturePhile, "we are obligated to hope". If we cannot provide the tools to hope, and then to act, what's left? I'll let each of you answer that question.**



The largest species of woodpecker found in North America, the ivory-billed woodpecker is officially proposed for delisting by the U.S. Fish & Wildlife as it is now considered extinct.

Michael took the last photograph known of this iconic bird (above).

## Species proposed for delisting due to extinction:

Species Name	Where Found	When Listed	Last Confirmed Sighting
Bachman's warbler	FL, SC	1967	1988
Bridled white-eye (bird)	GU (Guam)	1984	1983
Flat pigtoe mussel	AL, MS	1987	1984
Green-blossom pearly mussel	TN, VA	1984	1982
Ivory-billed woodpecker	AR	1967	1944
Kauai akialoa (bird)	HI	1967	1969
Kauai nukupuu (bird)	HI	1970	1899
Kaua'i 'ō'ō (bird)	HI	1967	1987
Large Kauai thrush (bird)	HI	1970	1987
Little Mariana fruit bat	GU (Guam)	1984	1968
Maui ākepa (bird)	HI	1970	1988
Maui nukupu'u (bird)	HI	1970	1996
Molokai creeper (bird)	HI	1970	1963
<i>Phyllostegia glabra</i> var. <i>lanaiensis</i> (plant)	HI	1991	1914
Po'ouli (bird)	HI	1975	2004
<a href="#">San Marcos gambusia</a> (fish)	TX	1980	1983
Scioto madtom (fish)	OH	1975	1957
Southern acornshell mussel	AL, GA, TN	1993	1973
Stirrupshell mussel	AL, MS	1987	1986
Tubercled-blossom pearly mussel	AL, IL, IN, KY, OH, TN, WV	1976	1969
Turgid-blossom pearly mussel	AL, AR, MO, TN	1976	1972
Upland combshell mussel	AL, GA, TN	1993	mid-1980s
Yellow-blossom pearly mussel	AL, TN	1985	1980s

"Only after the last tree has been cut down.

Only after the last river has been poisoned.

Only after the last fish has been caught.

Only then will you find that money cannot be eaten."

Native Cree Prophecy

## 2021 Trust Party

This year's Trust Party was nothing, if not an unmitigated success, any way you look at it. The attendance was large; the food and service were excellent; the fellowship was genial and upbeat; the entertainment was enjoyable; there was, for me at least, a 'being on cloud-nine' sense of wonder about the entire evening; the weather held and, last but not least, we raised a new record of funds for the Trust. This means each of you who helped make this evening a success, is responsible for the Trust being able to carry on its mission. That seems to defy superlatives. And speaking of "superlatives", while the Trust has many to thank for its ongoing success, the party itself could not have been the success it was without the selfless dedication of one Kathy Nervie. The effort extended by her for the past three Trust parties, almost defies description. So, three cheers for Kathy! When you see her on the mountain please extend your heart-felt thank yous to her. And through it all it seems she has maintained her sense of humor!

And finally...a heart-felt thank you is also extended to each of you, from me, who helped make this year's Trust Party fundraiser the most successful in its history. Three cheers to each and everyone of you who believes in what we do. You are all champions!

## Our Anonymous Donor is Baaaaccckkk!

Through the ongoing generosity of our anonymous donor, their \$25,000 matching grant has once again been offered for all BMP owners, of which they can take advantage.

Here's how it works: if you've never provided a financial gift to the Trust, this challenge will match your amount. If you've given in previous years, any amount above and beyond your last gift amount will be matched. Sounds pretty easy to me. How about you?

If you have any questions, please reach out to me and I'll answer them to the best of my ability. We look forward to a great finish to this year's fundraising efforts.



Above: Trust Board chair, Sabrina Watkins, waxes philosophically at the Trust Party.  
Below: Trust Vice-Chair Sheri Straw models the quilt made and donated by longtime donor, artist and BMP owner Nancy Ison.





## **Education Mewsings: Welcome Your New Wild Neighbors**

**By: Jen Knight, Co-Senior Naturalist/Education Director**

### **Lies Your Botanist Told You**

**By Jen Knight**

**I have some good news and some bad news. The bad news is that your high school biology teacher lied to you. We all remember learning that plants are distinct from animals because, among other things, they make their food from sunlight. This is not true... of all plants. The good news is that these aberrant exceptions are fascinating, beautiful, and can be found in your Balsam Backyard!**

**Unlike the green self-feeding autotrophs, heterotrophs do not produce their food but must consume it elsewhere. Ah ha! you're thinking - Venus flytraps, pitcher plants, all those bug-eating guys! These so-called carnivorous plants are also fascinating, beautiful, and can be found in North Carolina BUT produce their own carbohydrates via photosynthesis and chlorophyll. They evolved specialized mechanisms to trap insects to make up for nutrient-deficient soils, not as an energy source.**

**True heterotrophic plants are parasites and have little to no chlorophyll (and subsequent green color) of their own. The ghost plant (*Monotropa uniflora*) may be the starkest example of this and looks almost alien with its translucent white coloration. Because they don't depend on sunlight, heterotrophic plants can grow in extreme low-light conditions on dense forest floors. They avoid the intense arms-race of the green plants as they fight for a scrap of sunlight under the forest canopy.**

**So how does plant parasitism work? I'm so glad you asked! There are two main groups of botanical heterotrophs: direct root parasites and fungus parasites. The pinecone-looking flower of bear corn (*Conopholis americana*) (right) is a member of the broomrape family (*Orobanchaceae*) and is a root parasite that can be found throughout the Preserve in early spring. Special root structures called haustoria bore into a host plant's root system and absorb stored carbohydrates.**



**Another direct parasite is dodder, a yellow-orange vine that twines up a host plant with penetrating suckers. There are dozens of dodder species both native and invasive and are often host-specific. Certain dodder species that target peanuts, flax, clover, and other crops**

can be significant agricultural pests.

The second group of plant heterotrophs takes a slightly more roundabout route. Rather than tap directly into a plant for sustenance, they rely on mycorrhizal intermediaries. Mycorrhizae are sometimes described as the “roots” of mushrooms but in reality, they are much more. Many fungi exist largely underground as mycorrhizae and only produce fruiting bodies above ground occasionally to reproduce. Some fungi “link up” with other fungi and plant roots to create mycorrhizal networks where water, nutrients, energy, and maybe even information, are exchanged in a mutualistic, symbiotic accord – a forest Utopia.



Enter the Mycotrophs.

These plants, like the orchid spotted coralroot (*Corallorhiza maculata*) or pinesap (*Monotropa hypopitys*) (left) tap into the fungal “pipeline” supporting the autotrophic plants and steal away nutrients and carbohydrates. Again, some of these plants have very specific host fungi which themselves have specific mutualisms with trees species. Pinesap, as the name implies, can often be found growing under pine trees and ghost plant is often associated with beech trees.

Despite their highwayman approach to life, these plants rarely have significant effects on the plants and fungi they parasitize. The lovely beechdrops (*Epifagus virginiana*) has been used as an indicator of forest health as its absence may belie the presence of pathogens.

Wondering where you can find some of these dastardly beauties? Try typing species into the iNaturalist search bar and selecting “Map” results. There might be some right in your Balsam Backyard! If you find one, be sure to snap a picture and add to our growing collection of beautiful biota here on Preserve.

“Plants are nature’s alchemists, expert at transforming water, soil and sunlight into an array of precious substances, many of them beyond the ability of human beings to conceive, much less manufacture.”

— Michael Pollan, [The Botany of Desire: A Plant's-Eye View of the World](#)

## **The Trust Welcomes Its New AmeriCorps Service Member, Emily Taylor!**



**We are thrilled to welcome Emily Taylor as our new AmeriCorps service member. Emily is the sixth AmeriCorps service member to join the team.**

**Emily graduated from The University of Iowa in 2019 with a BS in Evolutionary Biology and a BA in Environmental Sciences.**

**She grew up in the suburbs but relished any opportunity to explore the wilds around her. Emily developed a passion for wildlife at a young age but turned it into a career during college when she volunteered—and eventually interned with—the local raptor center in Solon, Iowa. She has since combined her love for education and animal husbandry by working and volunteering at several zoos and nature centers, notably a great green macaw (parrot) rescue and breeding center in Guanacaste, Costa Rica. Before starting her AmeriCorps ser-**

**vice, she was lead camp counselor at the Austin Zoo in Texas for two seasons. Emily is already proving herself an asset to the Trust, giving fresh perspective and great ideas in caring for our animals and educating students.**

**Emily is serving with AmeriCorps, an eleven month national service program with positions offered by community and non-profit organizations. The Conservation Trust of North Carolina (CTNC) manages an AmeriCorps program that has placed 18 members with conservation and environmental groups throughout North Carolina. The program's goals are to connect thousands of people to the outdoors and to develop future leaders in conservation.**



**“I find the simplest of pleasures and greatest of joys when I look at a flower.”**

**(Morning glory, quote and photo by Michael Skinner)**