

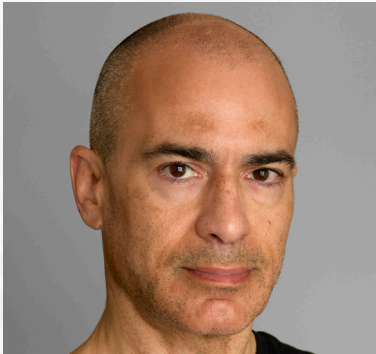
# Field Notes from the Forest

Nicholas School of the Environment - Wegner Gallery  
Spring 2023

In this second installment of "Field Notes from the Forest," we again invite you into the beautiful world of Duke's biggest and oldest teaching and research laboratory. The photographs of Volunteer Photography Corps member Peter Jeff Nicholls immerse us in the vibrant ecosystem around New Hope Creek in the Duke Forest's Korstian Division. They compel us to slow down and take notice of our natural surroundings. Perhaps we also see that bridge, a uniquely human structure, and begin to wonder how it might affect the balance.



**Duke Forest**  
Volunteer Photography Corps



PJ Nicholls, MD, completed Duke's Psychiatry Residency in 2006 and since then has been doing neuroscience research at Duke and in RTP. He began working on nature and sports photography in 2018, mostly in the Durham area, with occasional excursions to state parks in the Southeast.



**DUKE FOREST**  
Teaching & Research Laboratory  
ESTABLISHED 1931

The Duke Forest has been owned and managed by Duke University for teaching and research since 1931. It includes 7,100 acres of forests, fields, and streams in Durham, Orange, and Alamance counties. The mission of the Duke Forest is to facilitate research that addresses fundamental and applied questions across a variety of disciplines and to aid in the instruction of all students in their pursuit of knowledge, especially regarding the stewardship of our natural resources. The Duke Forest also offers a place to connect with nature and appreciate our natural resources through guided tours, access to the interpretive Shepherd Nature Trail, community science programs, and this volunteer photography project.

Learn more about the Duke Forest at [dukeforest.duke.edu](http://dukeforest.duke.edu).





# Field Notes from the Forest

This gallery showcases the work of Duke Forest Volunteer Photography Corps member Peter Jeff Nicholls who is documenting New Hope Creek at the outset of a critical stream restoration project. It also includes some black and white photographs from the Duke Forest archive. Read more about this project on the next page.

The next time you walk the foot trails along New Hope Creek in the Korstian Division of the Duke Forest, take your time and observe the abundant life all around you. Pull out your earbuds, quiet your inner monologue, and be still for a minute. Let the sights and sounds of the bustling natural world surround you.

This simple act of noticing builds a foundation of caring for our natural world. It creates the building blocks of stewardship, that sense of consideration and protection for the plants, animals, and habitats around us that moves us to action.



By engaging our senses – taking field notes, touching bark, smelling soil, and other acts that deepen our awareness, we get curious about the lives of the animals and plants around us. They become more central in our awareness. We begin to feel a connection. A belonging. A relatedness.

## Habitat Restoration

Among the beautiful photographs of animals, plants, and natural elements, notice the “Concrete Bridge” cutting across and through the landscape. This prominent and intrusive placement is by design. The black and white photographs show a shorter bridge in the 1950s, before its own impacts required the bridge to be lengthened.

The Office of the Duke Forest — with help from faculty and students at the Nicholas School — endeavors to restore this stream and its habitat through the removal and replacement of the well-known bridge installed by the Civilian Conservation Corps in the 1930s.

For nearly nine decades, the Concrete Bridge allowed vehicles and pedestrians to pass over New Hope Creek while culverts in the bridge conducted its flow. Unfortunately, this success in function caused a series of unintended consequences that continuously disturb the stream ecosystem. High flows overtop the bridge and scour the stream bed and stream banks imme-

diately downstream. Water impounds upstream of the bridge, allowing sediments to blanket the stream bed and alter the water quality. Permanently clogged culverts exacerbate these effects. And while some water does pass through, most aquatic species probably cannot, including the federally threatened Atlantic Pigtoe mussel (*Fusconaia masoni*) and one of its host species, the Creek Chub (*Semotilus atromaculatus*).

The new bridge – one that will span the entire creek to allow unimpeded flow and the restoration of the system’s dynamic equilibrium – requires complex engineering and logistics. This important restoration project depends on funding from a mix of sources: highly-competitive grants, matches from the Office of the Duke Forest, and importantly, from generous gifts made by conservation-minded donors. If you are interested in supporting this project, please email [restore-nhc@duke.edu](mailto:restore-nhc@duke.edu).



To learn more about this project visit [dukeforest.duke.edu/bridge](http://dukeforest.duke.edu/bridge)