

# HOPE MILLER:

RESEARCHER. SCIENCE  
COMMUNICATOR.  
TREE-HUGGER



BY: CHARLOTTE YANES

**H**ope Miller is a junior at the University of Florida (UF) majoring in Forest Resources and Conservation and serves as an undergraduate research assistant under Dr. Raelene Crandall. Miller researches the effect of prescribed burns in the pine savanna ecosystem. Her research is centered around the symbiotic relationship between wiregrass and pine tree saplings that grow after a burn. Miller also wants to educate the public about the importance of prescribed burns and is navigating how to best communicate her research with others.



“Many people associate all fire with destruction and fear. They do not want prescribed burns because they do not know the benefits,” said Miller. “If used appropriately, with the right training, it does have its benefits, even if it seems scary.”

Miller’s passion for conservation began at a young age, but she did not consider it a career path until her freshman year at UF. She started in the nursing program; however, after Hurricane Irma hit Gainesville, her focus shifted.

“Hurricane Irma came through during my freshman year and took down the 300-year-old oak tree in front of the Physics Building. It made me cry,” said Miller. “The next week I changed my major and got a tree tattoo. I felt like conservation was my calling.”

While Miller worked at Austin Cary Forest, she noticed wiregrass, a plant that survives prescribed burns, created a protective cover that promoted the growth of pine trees post-burn. After proving there was a statistical relationship between the two plants, Miller now focuses on finding out the reason why.

“You’d think there would be a competition factor and that the growth of the wiregrass would

overtake the pine trees, but it seemed like it was almost helping them,” said Miller. “We think that the wiregrass makes the environment cooler. It draws more water in and makes a more favorable micro-climate for the baby pine trees to be able to live.”

On top of conducting her research, Miller is passionate about sharing what she’s learned with the public. She feels the more she communicates the positive outcomes of prescribed burns, the more people will be open to the practice.”

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Her advice? “Conservation is so multi-faceted, it’s not just working with trees or tree-hugging,” she said, “just make one connection to an area of conservation you’re passionate about and go from there.”