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# News Release

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## **Kaibab National Forest works to create young citizen scientists**

**Williams, Ariz., March 28, 2017—For Immediate Release.** Last week, several Kaibab National Forest employees spent a day at Williams Elementary-Middle School teaching all 140 students in sixth, seventh and eighth grades how to make discoveries about plants and animals near their homes and on their public lands, thereby creating a small army of young citizen scientists who can assist land managers in understanding the biodiversity of the area.

Kaibab National Forest resource specialists demonstrated to the eager students a new way to interact with the forest and its flora and fauna using their smart phones and the free online platform [iNaturalist.org](http://iNaturalist.org). At the beginning of 2017, the Kaibab began a [citizen science project](#) to identify and document the biodiversity of the forest by encouraging visitors to take photos of plants and animals and post them to the project page using the free iNaturalist app.

“The students loved the iNaturalist day. The number of Forest Service employees in my classroom was phenomenal. Students were able to learn about a bunch of different parts of the Forest Service, and the adult-to-student ratio allowed for small groups while working outside,” said Isabel Caldwell, Williams Middle School science teacher. “Students were also able to learn how they can contribute to science in their own home, and they were given a tool to help them do that. The students were incredibly excited and thankful to have community members come into the classroom and work with them.”

Involving students in the fun but also scientifically valuable project is just one way Kaibab National Forest employees hope to connect members of the public with their public lands. By the end of just one day, the Williams students had collected more than 200 observations, and that number keeps increasing as students continue their citizen science work outside of the classroom. Students without smart phones are still able to participate by using the school’s laptops to upload photos of their scientific finds.

“It’s days like the one we had with the students that remind me why we do what we do,” said Mark Christiano, geographic information systems coordinator for the Kaibab National Forest and the planner of the citizen science project with the school. “Getting out to a school and connecting with kids is so important. Not only did we teach them a whole new way to interact with the forest, but we also connected them with a global community of citizen scientists.”

Once participants post photos of plants or animals to the [“Kaibab NF 2017 Citizen Science Project,”](#) they receive expert feedback from the iNaturalist community on their discoveries. Kaibab National Forest

biologists also help identify or confirm findings, providing a connection to local scientists who are interested in knowing more about and tracking the abundance and distribution of species on the forest.

“I hope our students learn to stop and smell the roses. Sometimes, they move so fast that they miss the beauty in their own backyard,” said Maya Caldwell, director of student services for the Williams Unified School District. “Williams is a beautiful town, and I hope this program helps them see how special our area is and how much Northern Arizona has to offer them. I also hope we have a few future scientists that bloom because of these experiences.”

The Kaibab National Forest created the year-long citizen science project with a couple goals in mind. First, biologists and planners hope to increase knowledge of plant and animal species, especially unusual or rare ones, and to inform the overall species list for the forest as well as management approach. Second, forest managers see the project as a way to build relationships with local communities and visitors, creating an opportunity for shared stewardship and turning visitors into scientists and champions of public lands and the resources they offer.

“By connecting people with natural and cultural resources, we hopefully help them understand the importance of public lands and the need to keep them public for our grandchildren and their children,” said Heather Provencio, forest supervisor for the Kaibab National Forest. “The Kaibab has so many special places and opportunities for everyone, and I’m excited this project is helping inspire young people to experience those things.”

Teaching the Williams Middle School students about citizen science and how to get involved through iNaturalist was just the first step. The Kaibab National Forest is planning a day-long field trip May 4 for all 140 students to visit the forest and collect observations side-by-side with wildlife biologists, botanists, silviculturists, archaeologists and other resource specialists. In the interim, students have been collecting observations around their homes or while out with their families camping, hiking, fishing, hunting or participating in other outdoor adventures.

“I am hoping that students take more time to observe their surroundings. Growing up in this time, it is easy for students to be completely absorbed in their technology and forget about the world around them,” said Isabel Caldwell. “I think one of the strengths of the iNaturalist program is that it allows students to use their technology to access the natural world. The more connected students feel to their surroundings and community the more likely they are to protect it, and iNaturalist provides students with a vehicle that fosters this connection.”

To participate with the Kaibab National Forest in its citizen science project, visit “[Kaibab NF 2017 Citizen Science Project](#)” on [iNaturalist.org](#).

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Williams Middle School students use their smart phones to participate in the Kaibab National Forest's citizen science project and contribute to species information in the Williams area.

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Kaibab National Forest employees demonstrate how to use iNaturalist to upload photos of plants and animals to the 2017 citizen science project.