# Newsletter

Week 47, 2023





The Park Institute was proud to sponsor three days of student engagement events for the National Parks Conservation Association's *Conservation Science Team* at Duke's Nicholas School of the Environment last week. Thanks to all who participated.

## FEATURED PARK



Photos and facts of your favorite parks, one issue at a time

**Pinelands National Reserve** New Jersey

**FACT 1**: At over 1 million acres, Pinelands National Reserve covers *one fifth* of the entire state of New Jersey and was established in 1978 as the country's **first national reserve**.

**FACT 2**: Pinelands is managed jointly by federal, state, and county agencies and officials, with *over half* of the reserve permanently protected.

**FACT 3**: Its ecology is so unique that Pinelands was designated as a UNESCO Biosphere Region in 1983. One of the Pinelands' many distinctive habitats is a 12,000-acre *pygmy forest*; a windswept, fire-prone stand of mature pitch pine and blackjack oak trees that grow to **only about 10 feet tall**.

To learn more, read this great <u>StoryMap</u>: THE PINELANDS AND ITS PEOPLE.

Nominate your favorite local, state, or national park <u>here</u> so our subscribers can learn about it.

## PARK PERKS



Visualizing key research to show why parks matter

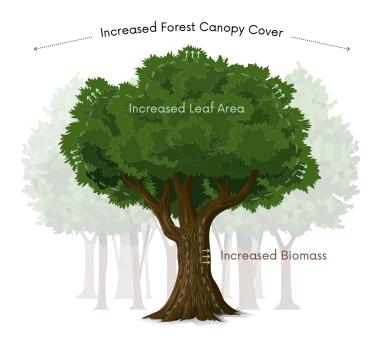
The environmental benefits of planting trees are well established, but the influence of tree species diversity is often underemphasized. An <u>article</u> published this September in the journal *Science Advances* studies the importance of tree diversity in the Sabah Biodiversity Experiment, a reforestation project in Malaysia. Utilizing 40m x 40m plots either *enriched* with multiple tree species (1, 4, or 16) or left to develop naturally, the authors examined a decade of forest regrowth beginning in 2002. The authors used satellite remote-sensing data to identify forest cover, biomass quantity, and leaf area index (LAI) as of 2012. Afterward, these data were incorporated into statistical models and used to assess the influence of reforestation measures.

Active reforestation was found to not only improve forest quality, but also was **particularly beneficial** when *diverse tree plantings* were performed. The study suggests that the species diversity of planted trees is an especially **strong predictor** of future forest cover, biomass quantity, and LAI.

While many factors affect the success of reforestation, the article indicates that tree diversity may prove particularly important. Beyond simple support for forest restoration projects, conservationists may need to consider the quality of restoration, backing plans that actively promote current tree diversity and the future health of ecosystems.

### Species-rich Restoration

Long-term benefits of sapling species diversity



## 

Who was the first person to study rocks?

the O-G-ologist

#### SHOPPING FOR THE RECENT OR SOON-TO-BE GRADUATE?

Sustainably built *Park-It Frames* are the perfect gift idea and help support the Institute's conservation workforce programming.



SHOP FRAMES