



As the National Parks Conservation Association honors parks this week with its annual ***Salute to the Parks*** event, we thank their Conservation Programs and Science teams for recently hosting members of the Duke Conservation Society to discuss the interdisciplinary world of protected area advocacy.

## FEATURED PARK



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

### Anza-Borrego Desert State Park California

**FACT 1:** At more than 600,000 acres, Anza-Borrego is California's largest state park. Protecting a diverse assortment of Colorado Desert habitats, the park represents a key conservation area in the broader UNESCO-designated Mojave and Colorado Deserts Biosphere Reserve.



**FACT 2:** Despite its arid desert climate, Anza-Borrego is home to hundreds of flowering plant species. When environmental conditions are right, some of these species can form colorful spring *superblooms* that carpet the desert floor.

Nominate *your* favorite local, state, or national park [here](#) so our subscribers can learn about it.

# PARK PERKS



Visualizing key research to show why parks matter

While the ecological benefits of wetlands are clear, their value to human society can be highly variable and difficult to quantify. This week's research, published in 2021 by the nonprofit organization Resources for the Future, assesses the flood mitigation value of wetland ecosystems. Analyzing National Flood Insurance Program (NFIP) claims, land price data, and the extent of wetland area across the continental US from 2001-2016, the authors sought to estimate the monetary value of the flood mitigation services US wetlands provide. In the process, they highlighted five key factors that influence the flood mitigation value of a given wetland.

## Variability of Flood Mitigation Benefits



### Wetland Proximity

Seemingly isolated wetlands 500-750m from a river's edge provide the most mitigation value during flood events.



### Precipitation Variability

Wetlands' mitigation potential is greatest during unusually severe storms, which are expected to increase in frequency as Earth's climate changes.



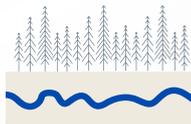
### Regional Variability

The mitigation potential of wetlands varies significantly based on a region's ecosystem, flood potential, and prevailing land uses.



### Land Use Conversion

When wetlands are degraded or destroyed, subsequent land use type heavily influences the risk of flooding.



### Long-Distance Spillover

Since subsurface connections often exist between wetlands, some of the most effective wetlands for flood mitigation may be many miles from rivers.

The authors estimated that US wetlands have **\$1.2 to \$2.9 trillion** in mitigation value depending on the discount rate used. Since the study did not attempt to quantify non-mitigation benefits, this estimate represents **only a fraction of wetlands' overall value**. These results strongly suggest that conservation of wetlands is justified not only ecologically, but economically as well. By quantifying the mitigation value of an often underappreciated ecosystem, this research provides a basis for further assessments of ecosystem service value, ultimately facilitating informed conservation policymaking.

## PLAY GROUND

Where do birds make seed bank withdrawals?

at their local branch

## FELLOWSHIP APPOINTMENTS

The first cohort of the NPCA Conservation Data & Communications fellowship program has been appointed and begins work next month. This year's fellows, **Ellie Harrigan** and **Hope Liu**, will synthesize data to create policy toolkits for the Southern Appalachian and Greater Everglades park landscapes.