Newsletter

Week 25, 2023





We're excited to officially kick-off summer with you. Please don't forgot to share with us your favorite parks and park stories by clicking <u>here</u>.

FEATURED PARK



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

Fire Island National SeashoreNew York

FACT 1: Despite being both an old-growth forest and a very rare ecological community, Fire Island's entire Sunken Forest is *only* a few hundred years old and represents a *complete* maritime forest succession cycle; beginning solely with windblown sand which led to beach grass, then woody shrubs, and finally, a mature stand of holly, oak, and cherry trees.





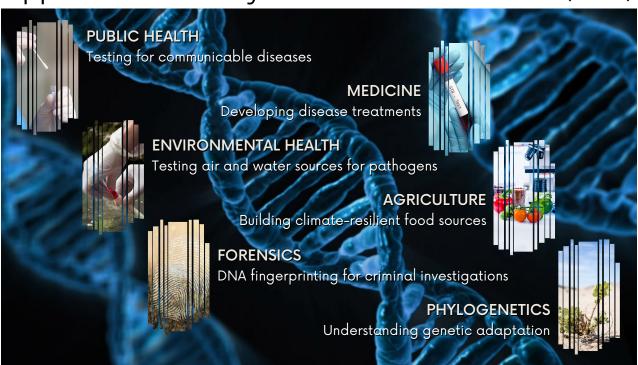
Nominate your favorite local, state, or national park here so our subscribers can learn about it.

PARK PERKS



Since last month marked the <u>end</u> of the federal COVID-19 public health emergency, we want to revisit parks' role in helping us reach this point. In 1966, researchers Thomas Brock and Hudson Freeze discovered in a hot spring within Yellowstone National Park a species of bacteria called <u>Taq</u> capable of surviving extreme heat. In 1984, biochemist Kary Mullis used the heat-tolerant properties of Taq enzymes to perfect PCR, a rapid DNA-replication process involving extreme temperature changes. Mullis was awarded the Nobel Prize in Chemistry for his discovery of <u>PCR</u>, which has since played a crucial role in COVID-19 testing and genetics advancements across modern society.

Applications of Polymerase Chain Reaction (PCR)



Had Yellowstone not been preserved in its current state, the discovery of Taq and its incredible properties might not have occurred. The history of PCR is a testament not only to the importance of preserving wilderness as a "living laboratory" for biological research, but also the unforeseen benefits national parks like Yellowstone can offer even to those who never visit them.





<u>Saving Snakes</u>: Snakes and the Evolution of a Field Naturalist by Nicolette Cagle, PhD University of Virginia Press, 2023