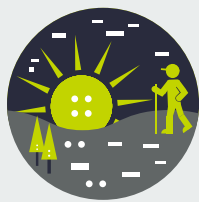


# The COVID-19 Pandemic is Changing the Way People Recreate Outdoors

On March 11th, 2020, the World Health Organization officially declared COVID-19 a pandemic. The pandemic is rapidly altering daily life and leading to changes in the way we spend time outside. In an effort to gather timely and relevant data on national recreation patterns, before, during, and after the pandemic, the Leave No Trace Center for Outdoor Ethics worked quickly with its research partner, Pennsylvania State University, to offer guidance to land managers, recreation providers, and outdoor enthusiasts across the country. In total, 1,012 outdoor recreationists were surveyed through the Leave No Trace community in a 48-hour window beginning on the morning of April 9th. Our hope is that the results of this rapid assessment will provide valuable information for managing the changing recreation use of public lands, predicting spikes in recreation, and offering insight for land managers as they work to protect the natural world. Here's what we know:



## Recreationists are **going out alone**, more often.

Respondents significantly\* decreased the average size of their outdoor recreation groups from 5.61 persons to 1.85 persons since March 11th.



## Recreationists are **staying closer to home**.

Prior to March 11th, 10.8% of respondents typically traveled within just two miles from home to participate in outdoor recreation. Respondents are now staying significantly\* closer to home, with 49.9% remaining within two miles.



## Recreationists are **adapting to the closures** of public lands.

Downhill skiing and snowboarding, camping, outdoor rock climbing, and backpacking saw the biggest drops in participation due to closures of public lands in direct response to the COVID-19 pandemic. Respondents reported increases in gardening, running, birdwatching and wildlife viewing, and bicycling and triathlon.



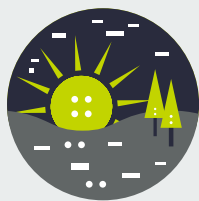
## Recreationists are **changing where they go** outside.

Our pool of active outdoor recreationists decreased use of all designations of public lands and increased use of neighborhood and city streets for outdoor recreation. These trends are significantly\* more accurate for urban residents.



## Recreationists are likely **not going to wait** for the risk of COVID-19 to completely go away before continuing recreation patterns.

86% of respondents indicated that they are extremely or very likely to return to their preferred recreation behaviors and patterns once their perceived threat of COVID-19 becomes minimal. More specialized recreationists—those who are more advanced and strongly identify with their outdoor recreation activity—reduced their participation since March 11th significantly\* more than less specialized recreationists and are significantly\* more eager to return to their preferred behaviors and patterns.



## Proactive personal health measures and **guidelines** are directing current and anticipated future recreation behaviors.

The desire to support physical and mental health through outdoor recreation and the guidance of the Center for Disease Control, World Health Organization, and land management agencies are significantly\* more important to outdoor recreationists' decision-making than social norms (i.e., what we think others are doing or think we should be doing), risk factors (i.e., likelihood of contracting or spreading COVID-19), or the need to substitute other activities during this time.



## Some of these behaviors are **likely here to stay** after COVID-19 subsides.

37.7% of respondents perceive that the COVID-19 pandemic will change their outdoor recreation behaviors long into the future. The most salient changes include utilizing local public lands more often, diversifying their recreation activities, and participating in more fitness-based activities.



Learn more at [lnt.org/why/problems-we-solve/covid-19-and-leave-no-trace](https://lnt.org/why/problems-we-solve/covid-19-and-leave-no-trace)

For more information contact Ben Lawhon at the Leave No Trace Center for Outdoor Ethics ([ben@LNT.org](mailto:ben@LNT.org)) or Dr. Derrick Taff at Penn State University ([bdt3@psu.edu](mailto:bdt3@psu.edu)).

Authors: William L. Rice<sup>1</sup>, Ben Lawhon<sup>2</sup>, B. Derrick Taff<sup>1</sup>, Tim Mateer<sup>1</sup>, Nathan Reigner<sup>1</sup>, and Peter Newman<sup>1</sup> (<sup>1</sup>The Pennsylvania State University Department of Recreation, Park, and Tourism Management; <sup>2</sup>Leave No Trace Center for Outdoor Ethics)

\*Statistically significant at a 95% confidence interval



PennState

Recreation, Park, and  
Tourism Management