THE COVID-19 PANDEMIC'S IMPACT ON PENNSYLVANIA'S NON-MOTORIZED TRAILS: FALL 2020 UPDATE

Increased Use, Added Strain, and a Newfound Appreciation
Pennsylvanians’ reconnection with the outdoors and trails became a bright spot in an otherwise bleak 2020. But even this upside came with challenges: finding bikes and kayaks to purchase became nearly impossible; parks and trails faced capacity issues with parking, restrooms, and trash; and trail groups grappled with how best to communicate guidelines to a mix of experienced and new walkers, runners, cyclists, and more.

When the first hints of these challenges surfaced in March of 2020, the Pennsylvania Environmental Council (PEC) began to capture trail data and survey information to characterize what was going on. That report, The COVID-19 Pandemic’s Impact on Pennsylvania’s Non-Motorized Trails, was released in June of 2020.

Pennsylvania’s public lands, covering more area than the entire landmass of Connecticut, provided much needed respite during this unprecedented time. It is critical to understand the difference between one-time surges and potential cultural shifts that require different approaches to planning and funding to continue to make Pennsylvania a leader in trails. For these reasons, PEC produced a follow up to the Spring report, looking at a full trail season (March through October) to get a better sense of the on-the-ground impacts. What we found is two-fold: First, trail managers’ positive outlook on the impacts increased throughout the year and second, that as the use numbers remained high, so did the feeling that the newfound users were a positive outcome of an otherwise challenging year.

We believe that increased use and the impacts on trail resources is here to stay. This report serves as a call to all those who believe in trails – legislators, local officials, agencies, trail groups, and trail users – to double down on their support. As the value and importance of this infrastructure becomes even clearer to Pennsylvanians, we need to ensure that the investments that have been made in our recreational infrastructure are maintained and supported.

By most trail manager accounts, this was a successful year for trails. Attracting new audiences to outdoor recreation is what trail advocates have always wanted. With every success, however, comes challenges: increased littering, overuse, and backlogged maintenance, to name a few. Incredibly, despite the challenges faced in this unprecedented year, three quarters of trail managers perceive the pandemic’s impact on the trail they manage to be “mostly positive” (up from 60 percent in the Spring). This positive outlook is likely due to the new interest and attention brought upon trails.

The surge in visitation does take a toll on trails and those who tend them. As one trail manager shared, COVID “has challenged us to meet unrealistic expectations coupled with unprecedented visitation and use.” It appears that trail maintenance staff and volunteers spent the better part of 2020 making ends meet despite fewer resources and greater demand. They are doing so admirably, but volunteer shortages, construction delays, and trail user frustrations with issues such as closed bathrooms, crowded trails, and packed parking lots suggest that support is needed. As with the Spring report, PEC urges every level of government – local, state, and federal – to treat outdoor recreation investments as a critical part of economic recovery. Organizations that manage trails need support now more than ever.
AMONG THE KEY FINDINGS ARE:

- Managers’ overall outlook concerning the pandemic's impact on Pennsylvania trails is encouraging, with 75 percent reporting “mostly positive” impacts. This is up from 60 percent of responding managers reporting this outlook in the Spring. Their outlooks improved across all trail types and trails of varying distances. This could indicate that managers that were initially apprehensive (particularly those overseeing natural surface and long-distance trails) grew to view the season in a more positive light by October.

- The great majority of managers have recognized some important positive impacts to the season. Ninety-three percent of managers reported that trails were used and perceived as positive outlets this year, and 87 percent reported increased awareness and interest in their trails. Nearly three quarters observed a change in trail user demographics as an upside. This is a significant improvement from the Spring’s expressed concern for what the longer term impacts would be.

- Managers have been consistent in their reporting of negative impacts on the trails they manage. Both in the Spring and Fall, the top challenges reported included delays in seasonal maintenance, overuse and crowding, loss of revenues, the temporary loss of volunteers, and increased logistics required of trail and maintenance staff. Of particular concern is a 10 percent increase (from the Spring to the Fall survey) in trail managers reporting the loss of revenues.
METHODOLOGY

TRAIL MANAGER SURVEY

An 18-question Google Form survey, “COVID-19’s Impact on Pennsylvania Trails (Fall 2020),” was distributed to identified Pennsylvania non-motorized trail managers beginning on October 22 and remained open for 18 days. The survey was similar to the April 2020 manager survey but added a few questions to ascertain how perspectives and circumstances may have changed since the Spring. The survey was distributed by PEC’s project team and trail partners throughout the survey period.

A total of 67 responses were received for 60 trails, parks, and natural areas. For comparison purposes, the April 2020 survey data included responses from 74 managers representing 67 trails, parks, and natural areas. Thirty-nine of those represented in the Fall survey data were also included in the Spring data, providing a measure of continuity from one report to the other. All Fall survey responses were complete, considered valid, and have been included in the results shared in this report.

Multiple responses were received for the following trails: Great Allegheny Passage, Knox & Kane Rail Trail, North Country National Scenic Trail, Schuylkill River Trail, and the Westmoreland Heritage Trail. In these cases, a few respondents were reporting on the specific trail section that they maintain, while others offered a trail-wide perspective.

While the survey asked trail managers to submit one survey per trail or trail section, some responses received from municipalities, parks, and preserves were representative of their overall trail system. These systems are generally shorter in total length and are also the types of “close-to-home” trails to which people were directed under stay-at-home orders.

Survey responses were sorted and analyzed by geographic region, trail length (in ranges of 1-14 miles, 15-39 miles, and 40+ miles), and trail type (mainly multi-use/rail-trail, natural surface trail, and water trail).

TRAIL COUNT ANALYSIS

Much like our Spring Survey, the trail manager survey asked responding managers if they could provide electronic trail counts or other measures to indicate a year-over-year change in trail use. The goal was to capture a six-month window, what can best be described as the core of the traditional “trail season.” Because of the timing of the request, a few managers were able to provide data through October, providing further evidence that trail use numbers continued throughout the year. The collection of quality, reliable trail count data that covered the full trail season for the years 2018, 2019, and 2020 proved to be a larger challenge than we had originally hoped based on our Spring collection. In the end, we were only able to collect five reliable datasets covering March through October 2020. Although this is a smaller number than was used for the Spring report, we are confident that the numbers, when taken along with the anecdotal evidence, are representative of the trends across the state’s trails.

A total of 28 managers offered to make their trail count data available. Most of this data was sourced either through the individual managers or other sources, including the Delaware Valley Regional Planning Commission and the Pennsylvania Department of Conservation and Natural Resources (DCNR), sharing data for counters maintained by the Rails-to-Trails Conservancy. While the project was not limited to multi-use/rail-trails, it is important to note that usable year-over-year data was provided almost exclusively on this trail type.

Trail count data represented collection sites throughout Pennsylvania. Trail managers provided helpful insights to identify issues concerning the accuracy of electronic counters for multiple reasons. By increasing the number of months we sought to analyze, we also increased the likelihood that there would be issues with securing reliable data. In the end, we were only able to use five trail counters for the full six-month period, diminishing our ability to make assertions about total numbers, only percentage increases. Data from some of the electronic counters were removed from analysis due to reported inaccuracies affecting trail counts within the targeted
months. These inaccuracies ranged from problems related to sensors, battery connectivity, data uploading, ant infestations, spider nesting, moisture, and vandalism. Data from another 19 electronic counters were also omitted from analysis due to a lack of previous year counts for comparison.

Microsoft Excel was used to organize and analyze trail count data to determine if there was an overall change in counts between the period of March and October 2020 as compared to 2018 and 2019. Multi-year data from the five electronic trail counters was aggregated by month and year for comparison across years to generate percentages of change. The five Eco Counters included in the analysis were installed and maintained by the Delaware Valley Regional Planning Commission and the Rails-to-Trails Conservancy.

![Monthly Trail Usage 2018 - 2020](image)

**TRAIL MANAGER SURVEY DETAILED RESULTS**

The Spring survey results were reported in terms of themes observed by trail type, trail length, and geographic region. The Fall survey results tend to reinforce the Spring findings, with certain increases being amplified as noted in the Key Findings portion of the Executive Summary. For purposes of the Fall report, the survey results are organized according to **New Audiences, Unique Challenges**, and **Looking Forward** in terms of organizational capacity and trail sustainability.

**NEW AND APPRECIATIVE AUDIENCES**

One manager shared hearing “I’ve lived here for years, but never used the trail before this season.” With 87 percent of trail managers reporting an increased awareness and interest in their trails this year, it is possible that every trail manager has heard similar statements. Even more staggering is that 93 percent of managers said that their trails were being used and perceived as positive outlets.

Nearly three quarters of managers observed a change in demographics, making this the third most reported positive impact. In this instance, demographics refers to different patterns of use (family units vs. solo exercisers), age ranges, and possibly racial and ethnic differences.
These shifts were observed in various ways, including seeing new faces out on the trail; steadily increasing social media audiences; specific comments like the one above (“…never used the trail before this season.”); and other, more direct means.

Not only are new people making their way to trails, but people seem to have really valued the presence of trails in a time that there was little else to do for recreation. As one trail manager put it, “Outdoor recreation is a real salve for public health during a pandemic.” Another manager noted, “Users are friendlier to one another, and more appreciative of the trail.” Anecdotally, conflicts on trails seem to be more related to new users not being well versed in trail etiquette and points to a larger need for effective communication strategies that may be beyond the purview of individual managers.

**UNIQUE CHALLENGES**

The Spring research revealed that the most apprehensive managers were those managing natural surface trails and long-distance trails of various trail types. (Water trail managers, too, were apprehensive concerning the impacts of the pandemic, but the sample size was too small to analyze.)

The natural surface trail managers tended to be concerned about their trails’ carrying capacity (with overuse resulting in erosion and other damage) and the challenge of social distancing on narrower paths. Those managing long distance trails, for the most part, expressed concerns related to pandemic restrictions on tourism.

As noted elsewhere, these trail managers’ outlooks did improve throughout the season. These shifts are detailed below along with insights shared by the managers.

**Natural Surface Trails: Steady increases and brighter outlooks**

Natural surface trail managers went from a 46 percent “mostly positive” outlook in our Spring Survey to 64 percent, an 18-point increase. The term “Natural Surface Trails” refers to a wide variety of trail types in our report, including hiking trails like the Appalachian Trail and walking paths commonly found in conservation lands. Because the trails tend to be made without imported materials, they tend to show wear and tear from increased use during inclement weather such as typically seen in the Spring. With Summer’s drier conditions and plant life soaking up rainfall, the trails tend to stabilize and require less maintenance. This may account for the overall positive feelings of the managers as the worst case scenarios were behind them by the Fall.

A good snapshot of the use patterns on natural surface trails would be the data we received from the Standing Stone Trail, an 84-mile connector between the Mid-State Trail and the Tuscarora Trail in Central PA. The Standing Stone Trail went from a modest six percent increase in use during March 2020 over March 2019 to a record 7,241 user passes in May, or a 157 percent increase year over year. Compared to a more developed rail-trail, the total use numbers are not huge, but on a trail that typically doesn’t have much in the way of specifically developed trailhead infrastructure, such increases can be overwhelming.

**Long-Distance Trails: A Challenging Year for Tourism**

While 32 percent of long-distance managers reported “mostly positive” impacts in the Spring, 53 percent reported mostly positive impacts in the Fall, a 21-point increase. Feedback from Trail managers indicated that tourists returned to some degree during the summer months once there was a sense that services would be available in trail communities consistently. Also, retailers around the state adopted and promoted their COVID-19 pre-cautions, leading people to feel more comfortable that they could again visit. Still, the season did lead to mixed fortunes for trail businesses. For example, while bike shops may have had a boom year, bed and breakfasts faced the same challenges that the lodging industry had with likely fewer financial reserves.

Related quotes:

“Our data suggest trail travel is up significantly, which we celebrate – outdoor recreation is a real salve for public
health during a pandemic. However, overnight and thru-travel was stymied much of April, May, and June, until businesses cautiously opened again. On the whole, it’s been a tough year for trail-facing businesses.”

“There has been a strong challenge to our trail oriented businesses. While trail use is up, tourism is down, so places like lodging and restaurants are having a difficult time. We are also hearing more stories of poor trail etiquette that is likely the result of crowding and conflict between different modes of users. Also many complaints about trash, dirty bathrooms, or about things being closed. If quarantining out-of-state visitors becomes a reality in 2021, it will reduce overnight and thru-rider traffic. If restaurants are limited to take-out or outdoor seating, it may also reduce overnight and thru-riders. Many smaller B&B’s may shut down. Many businesses may reduce part-time or full-time staff.”

“I have] mixed feelings since people used (the trail) even though it was supposed to be closed, There was also more than usual trash especially in parking lot areas. The State shutdown pushed us back from doing normal maintenance work into the hotter weather.”

Water Trails: Safety Concerns Heightened in Year with New Paddlers

In August, the NPD group, an economic research firm focused on the outdoors, released sales numbers that confirmed what water trail managers were seeing on their local rivers. Paddle sports sales (canoes, kayaks and stand-up paddleboards) were up 57 percent from 2019. Although this did elicit positive responses from managers, the discussion around water safety and reaching new audiences is one that has been a constant topic as boats have increased in popularity and are now frequently sold through big box stores. As one manager put it: “We saw spikes in water trail usage. Seeing new paddlers out on the water while also seeing that paddling classes/education opportunities were limited due to the pandemic, was concerning. We needed to refocus on the water trail and develop ways to get more safety information out to paddlers.”

LOOKING FORWARD

Responding trail managers were asked how the pandemic is impacting their organizations’ plans over the next 12-18 months. The most selected options among eight impacts that were provided were special events, timing of events and projects, volunteer recruitment and management, fundraising, and trail maintenance.

The concerns around special events and fundraising overlap for many trail organizations and reflect hardships already experienced in 2020. (Fifty-two percent of trail managers – up from 42 percent in the Spring – similarly reported the loss of revenues as a significant impact on their organization in 2020.) As said one trail manager, “If the pandemic is not wrangled, annual events may be cancelled again,” and another: “I believe our operations will be different for a very long time.”

Some trail organizations, however, have successfully navigated challenges brought on by the pandemic. The North Pocono Community Trails, a system of local natural surface paths, offers a great example. According to the trail manager, “With schools and work closed, people found the trails system to be a pleasant respite from the chaos. Our daily (trail use) numbers during the summer nearly matched our (typical) weekly totals.”
the North Pocono Trails Association managed to leverage the increased trail use. As reported by the trail manager: “Due to the new trail users, the increase in volunteers was tremendous and allowed the Association to complete improvements to the trails and amenities for their use.”

**INSTAGRAM V. INFRASTRUCTURE: SOCIAL MEDIA’S IMPACT ON TRAILS**

The “Instagram Effect” – the issue of trails and natural areas becoming overrun with users after having been tagged and popularized on social media – is not a faraway issue that occurs in other states. Once remote vistas or swimming holes are now frequently tagged in social media posts, which includes geo-location information, making it easier for a new visitor to navigate there with their phone. While pleased to have new users, Pennsylvania trail managers have their stories of crowded trailheads, parking lots and overflowing trash cans. In both the Spring and Fall survey responses, managers wrote of stressed trail systems and facilities. From the fall:

- “Our trails were overwhelmed at times, due to the pandemic.”
- “Increased use put a lot of stress on our trails and preserves.”
- “Our parking lots could not handle the extra parking issues”

This can’t all be blamed on social media, but it certainly was a contributing factor to management issues. With a transition to more time spent online, managers will need to be more cognizant of the power of social media posts to impact their trails and work to get in front of viral fame (or infamy).

**MOST MENTIONED IMPACTS OF COVID-19 IN FALL 2020 COMPARED TO SPRING 2020**

![Graph showing impacts of COVID-19 on trails]

These impacts were the most mentioned by trail managers in both Spring and Fall 2020, but the number of managers who identified them changed between the two season - sometimes increasing and sometimes decreasing depending on the specific impact. Most managers noticed an increased awareness in trails between spring and fall, for example, but fewer identified a loss of volunteers as a challenged as the pandemic continued.
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TRAILS, PARKS, AND NATURAL AREAS REPRESENTED IN SURVEY RESULTS

*Indicates those represented in both the Spring and Fall survey results.

Allegheny River Trail*
Appalachian Trail*
Armstrong Trails*
Bald Eagle Valley Trail*
Brandywine Conservancy & Museum of Art Campus Trails (listed in Spring as “Chadds Ford Campus Trails”)*
Buffalo Valley Rail Trail*
Butler Freeport Community Trail*
Chester Creek Rail Trail
Chester Valley Trail*
Clarion-Little Toby Trail
Corry Junction Greenway Trail*
Countryside Conservancy Trolley Trail*
Cresheim Trail
Cumberland Valley Rail Trail*
D&H Rail-Trail*
D&L Trail*
Dead Man’s Hollow conservancy trails
Delaware River Water Trail*
Doylestown Township community trails*
French Creek Water Trail*
Gettysburg Inner Loop
Ghost Town Trail*
Great Allegheny Passage*
Hanover Trolley Trail*
Hawk Mountain Sanctuary*
Hemlock Trail*
Howland Preserve Trails
Johnstown Run Streamside Trail
Kiski-Conemaugh Water Trail
Knox & Kane Rail Trail*
Lacawac Sanctuary
Lackawanna River Heritage Trail*
Lebanon Valley Rail-Trail*
Letort Nature Trail
McClimont Trail*
Nor-Bath Trail
North Branch Canal Trail*
North Country National Scenic Trail
North Delaware River Greenway
North Pocono Community Trails*
Northwest River Trail (listed in Spring as “Northwest Lancaster County River Trail”)*
Perimeter Trail (Boyce Mayview Park)
Redbank Valley Trails*
Riverview Park*
Roaring Run Trail*
Royersford Riverfront Park and Trail
Schuylkill River Trail*
Sheepskin Trail*
Standing Stone Trail and the Thousand Steps
Susquehanna Warrior Trail
Three Rivers Heritage Trail*
Three Rivers Water Trail*
Union Canal Bicycle & Walking Trail
Warren to North Warren Bike/Hike Trail
West Penn Trail*
Westmoreland Heritage Trail*
Whitemarsh Township community trails
Willistown Conservation Trust Preserves
Youghiogheny River Water Trail*
Zacharias Trail*

TRAIL COUNTERS REPRESENTED IN TRAIL COUNT ANALYSIS

* Provided sufficient data for inclusion in year-over-year trail count analysis

BCMA Harvey Run Trail
BCMA River Trail
Chester Valley Trail (Bacton Hill)
Chester Valley Trail (Cedar Hollow)
Corry Junction (Hereford Road)
Corry Junction Plastics Road
Corry Junction Simmons Road
Countryside Cons Trolley Trail
Great Allegheny Passage
Schuylkill River Trail (Pottstown)*
Standing Stone Trail
Struble Trail (Shellmire Uwchlan)
Chester Valley Trail
Delaware River Trail at Port Richmond
Schuylkill River Trail at Spring Mill*
US 202 Parkway Trail
Wissahickon Trail*
Buffalo Valley Rail Trail*
Cumberland Valley Rail Trail*
Susquehanna Warrior Trail

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PROJECT TEAM:

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Brian Malcarne, York College of Pennsylvania, trail count analysis

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