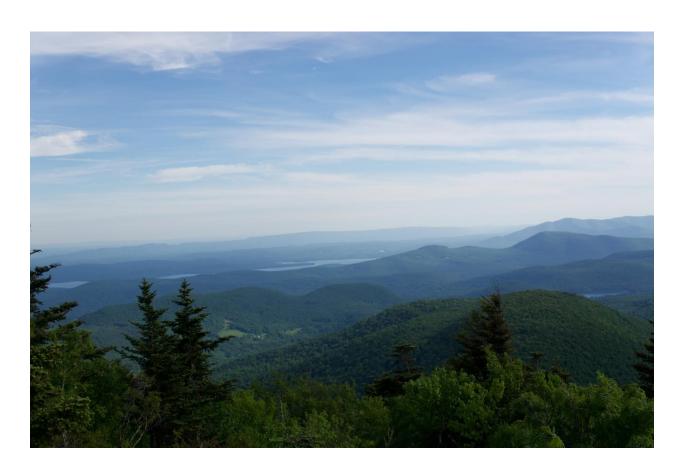
Visitors' Perceptions of Trail Registries in the Catskill Park



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Contents

Introduction	3
Methods	4
Results	5
Response rate	5
Visitor Demographics	5
Registry Sign-in Rates	6
Reasons for signing in	9
Trail use	10
Respondents' Perceptions of Risk	12
Respondents' Perceptions of Difficulty	
Visitors' Perceptions of Trail Sign-in Stations	14
Discussion	
Conclusion	17
Acknowledgements	19
Literature Cited	20
Appendix A. Visitor survey	21

Introduction

The Catskill Park is a state park in southern New York that consists of 700,000 acres of forest preserve, wilderness areas, and wild forest (DEC, 2020). The goal of this study is to better understand the factors that encourage visitors to use trail registries in the Catskill Park. To achieve this goal, a visitor survey was conducted at 12 different trailhead locations within the Catskill Park (Figure 1). Six of these locations are in Region 3 of the NYS Department of Environmental Conservation (NYSDEC) and six are in Region 4. The objective of this study is to identify if visitors' perceptions concerning risk of trail use and trail difficulty, as well as level of trail experience, influence the percent of registry sign-ins. By understanding visitors' perceptions of trails and previous trail experience, forest managers may be better able to implement management strategies that increase the use of registries by visitors.

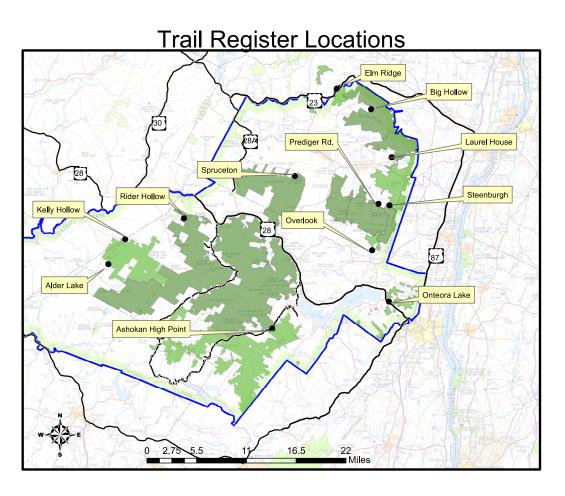


Figure 1. Trail registry locations sampled within the Catskill Park (map courtesy of Pine Roehrs, NYSDEC).

Methods

Trailhead locations were selected to include a diversity of visitor experiences. Trailheads were selected by a few employees from Region 3 of the Department of Environmental Conservation (DEC) based on their sense of relative risk of the trail, and so that an equal number of sites in the two regions of the Catskills (regions 3 and 4) were sampled. A diverse representation of wild

forest, wilderness, front-country, and backcountry sites were chosen to see how different experiences may influence users to sign the registry. A similar study took place in 2017 (Archer, 2017) and the DEC tried to avoid overlapping the trailheads included in that study with the trailheads included in this study.



The survey was written by the second author with input from the first author, and employees of the NYSDEC and the Cary Institute of Ecosystem Studies. A pilot study of the initial draft questionnaire was completed with the assistance of the NYSDEC and several organizations based in the Catskills (i.e., The Catskill Center, Catskill 3500 Club, Adirondack Mountain Club, Finger Lakes Trail Conference, NY-NJ Trail Conference, Trout Unlimited, and The Catskills Visitor Center). Representatives of these organization completed the survey and provided comments on the questionnaire; revisions were then made to the questionnaire.

The sampling schedule was set up to survey visitors between May 25 and August 20, 2019, at each location a total of six times (three times on a weekend and three times during the week); however, weather conditions prevented sampling on all days for all trailheads. Two different data collection techniques were used on sampling days: a visitor observation data sheet and the visitor questionnaire. The observation data sheet was used from 8 am to 4 pm to observe the number of visitors using the trailhead, number of visitors with packs, number of visitors with appropriate footwear for trail use, and number of visitors who signed the registry between 8 am and 4 pm.

This information allowed the researchers to calculate the sign-in rate (i.e., proportion of visitors signing in) at every location at the end of the day.

The second data collection technique was the visitor survey. Visitors were asked to fill out a 17-question survey upon exiting the trail they had used that day. The survey took approximately seven minutes for each user to complete and was administered via tablet. All data were collected by Qualtrics software, which enabled the researchers to easily collect observational and survey data electronically and upload that data at the end of each day. The survey was anonymous and asked users a series of questions about their trail usage in the past, how often they frequent the area, what activity they were taking part in that day, and whether they decided to sign the trail registry or not and why. It also asked users for their perceived risk of using the trail and for their perceptions of the difficulty of the trail.

Observational and survey data were collected from 8 am to 4 pm daily on sampling days. Excel and the Statistical Package for Social Sciences (SPSS) were used for analysis. Excel was used to summarize data and calculate percentages. SPSS was used to perform t-tests to find significant differences between visitors who signed the registry and those who did not, and to conduct regression analyses.

Results

Response rate

The total number of survey respondents was 352. Sixty-two individuals did not wish to respond to the survey, yielding an overall response rate of 85%.

Visitor Demographics

The average visitor at the sampled trailheads used trails in general six to ten times each year, used the trail they were visiting that day two to three times in the past five years (i.e., since 2015), perceived the difficulty level of the trail they were using that day to be easy, and used the trail they were visiting that day primarily for hiking; the majority (56%) were male (43% were female, and 1% were other or "prefer not to say"; N = 352). The average age of visitors was 45 years old (the range was 18-76; N = 346). Most trailhead users were visiting with two other

people (mainly friends and family). Approximately one-fifth of visitors (21%) who filled out the survey had an income over \$150,000; smaller percentages of visitors had lower levels of income (12% were in the \$125,000 to \$149,000 range; 17% were \$100,000 to \$124,999; 16% were \$75,000 to \$99,999; 18% were \$50,000 to \$74,999; were 13% \$25,000 to \$49,999, and 4% were \$0 to \$24,999; N = 298). Most visitors were from New York State (74%); 10% were from New Jersey and 4% were from Pennsylvania (N = 351). Visitors from Australia, Canada, China, India, Paraguay, Spain, Sweden and the United Kingdom were also recorded. Of the visitors observed (N = 4,662), 59% had backpacks or daypacks, and 94% had footwear appropriate for trail use (i.e., adequate walking shoes or hiking boots). No significant differences were found between those who signed-in at the registry and those who did not for the demographics of age (p = .990), level of education (p = .555), or income (p = .585).

Registry Sign-in Rates

Table 1 shows the overall sign-in rates for survey respondents and visitors observed at each trailhead location. Overall, 46% of survey respondents indicated that they signed-in at a registry (N = 352). Observational data were also collected to identify the percentage of trailhead users who signed in either for themselves or for their group as a whole. Observations indicated that 4,662 visitors used the trailheads between 8 AM and 4 PM on survey days. Registry data (collected at 4 PM on each survey day from the registry at the trailhead being sampled) indicate that 1,080 trailhead users (23%) were accounted for in the registries, either by signing-in for themselves or as part of their group. When the data for the Laurel House trailhead are excluded from this analysis (due to the extremely low observed sign-in rate of 7% at this location), the overall sign-in rate for the 11 remaining trailheads is 56%.

Table 1. Percentage of respondents and all visitors at each trailhead who signed in.

Location	Number of survey respondents	Percentage of respondents who signed-in	Percentage of observed visitors accounted for in registry
Alder Lake	20	50%	46%
Ashokan High Point	15	67%	79%
Big Hollow	18	67%	82%
Elm Ridge	35	40%	38%
Kelly Hollow	9	89%	72%
Laurel House	100	21%	7%
Onteora Lake	29	38%	32%
Overlook	57	53%	54%
Prediger Road	23	65%	82%
Rider Hollow	5	80%	95%
Spruceton	9	67%	57%
Steenburgh	32	69%	76%
TOTAL	352	46%	23%

Further analysis reveals a significant negative correlation (r = -0.363, p = .005, N = 57) between the number of visitors observed daily at each trailhead during the summer of 2019 and the proportion of visitors who signed in at the registry each day. This result indicates that as visitor numbers increase at a trailhead, the *percentage* of visitors signing-in at the registry decreases (Figure 2). Linear regression results indicate that the number of visitors at a trailhead positively influences the overall *number* of sign-ins at the trailhead ($R^2 = 0.740$, p < .001, N = 57, Figure 3). In other words, as the overall number of users to a trailhead increases, the *number* of sign-ins increases, but the *percentage* of sign-ins decreases. These results suggest that visitors may perceive trail use as less risky when other visitors are in the area, and, consequently, may sign-in less. In addition, at crowded trailheads, the high numbers of visitors may physically prevent some visitors from signing in.

Estimates of the number of visitors to the trailheads sampled can be calculated by using the regression equation below if the number of visitors signing in to a registry is obtained (a log10 conversion of the variables will be required). Daily registry data should be used for estimates. In order to meet regression assumptions, the log of the number of visitors signing in on sample days was used as the dependent (Y) variable in the regression, and the log of the number of visitors at each trailhead on sample days was used as the independent variable (X). The unstandardized regression equation is:

Y Log number of visitors signing in = 0.159 + 0.661 X Log number of visitors

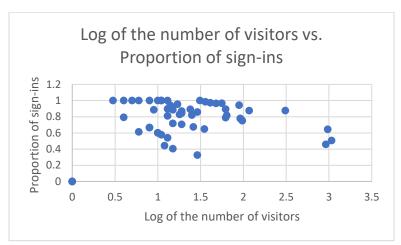


Figure 2. A scatterplot of the *proportion* of visitors signing in at each trailhead (Y) vs. the log of the number of visitors observed at each trailhead on sample days (X; n = 57). Note: In order to "spread out" the data, the log of the number of visitors was used in this figure.

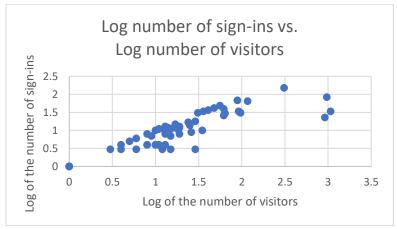


Figure 3. A scatterplot of the log of the *number* of visitors signing in at each trailhead (Y) vs. the log of the number of visitors observed at each trailhead (X; n = 57). Note: In order to "spread out" the data, the log of the number of visitors was used is used in this figure.

Reasons for signing in

Tables 2 and 3 indicate the reasons why visitors likely decided to sign in or not during their visit. The most common reason indicated for signing in was "signing in is important for my safety and/or the safety of others in my group;" 87% of visitors who signed the registry indicated this as a reason for signing in. The second most indicated reasons were that "it only takes a minute to sign in" and "signing in helps New York State determine where to allocate funding;" 66% of visitors who signed the registry indicated both of these as reasons for signing it.

Visitors who decided to not sign in during their visit (43%) indicated that the main reason for not signing in was "other," which included responses such as "I didn't know about the registry" or "I forgot about the registry." Thirty-three percent of visitors also indicated that they did not sign in because "I was anxious to get started on the trail and didn't want to take the time to sign in."

Table 2. Percentage of visitors according to why they decided to sign in (n = 163).

Why did you decide to sign in during your visit?	Percentage
Signing in is important for my safety and/or the safety of others in my group.	87%
It only takes a minute to sign in.	66%
Signing in helps New York State determine where to allocate funding.	66%
Signs near the registry indicated that I needed to sign in.	30%
Other.	4%

Table 3. Percentage of visitors according to why they did not sign in (n = 187).

Why did you decide to not sign in during this visit?	Percentage
Other.	43%
I was anxious to gets started on the trail and didn't want to take the time to sign in.	33%
Signing in is not necessary since this is an easy trail.	21%
Signing in is not necessary since I have used this trail before.	11%
Signing in is not important to me and/or is a waste of my time.	10%
Someone else in my group signed in for me.	2%
I don't want other trail users to see my personal information.	2%
I don't want the NYS DEC to have my personal information.	1%

When a logistic regression was used to identify which variables affect if a visitor signs-in or not, only one variable was identified as significant: the log of the number of visitors at the trailhead on the day of the respondent's visit (p < .001). The regression was able to correctly predict 66% of the time if a respondent signed in or not, based on trailhead visitation.

Trail use

Tables 4 and 5 respectively show respondents' trail use per year overall (i.e., both in and out of the Catskill Park) and trail use specifically at the sampled trailheads. Twenty-nine percent of survey respondents indicated that they use trails in general 21 or more times annually (N = 352). Half (50%) of the respondents indicated that they had used the trail they were hiking that day one time only; 18% indicated that they had used it 2 to 3 times, 9% indicated 4 to 5 times, 7% indicated 6 to 10 times, and 16% indicated 11 or more times (N = 352). In addition, users who signed in used trails in general more frequently (on average, 11 to 20 times per year) than those who did not sign in (6 to 10 times per year; p = .002). These results reveal that, overall, visitors may be experienced trail users, but only half may be experienced or familiar with trails in the Catskill Park. There was no significant correlation between the proportion of visitors who signed in at a trailhead's registry and the number of times respondents used the trail over the past five years (i.e., since 2015; r = .050; p = 0.356; N = 347).

Table 4. Respondents' trail usage per year (i.e., both inside and outside the Catskill Park; N = 352).

Total trail usage per year	Total trail usage per year
0 to 1 times per year	6%
2 to 5 times	20%
6 to 10 times	26%
11 to 20 times	19%
21 or more times	29%

Table 5. Percentage of respondents surveyed at each trailhead according to number of times they used that trailhead since 2015 (N = 352). Percentages above 20% are in bold.

Lagation		Number of	times responde	nts used trail	
Location	1 time only	2 to 3 times	4 to 5 times	6 to 10 times	11 or more
Alder Lake	60%	10%	5%	15%	10%
Ashokan High Pt.	67%	13%	7%	0%	13%
Big Hollow	44%	28%	11%	6%	11%
Elm Ridge	27%	9%	9%	9%	47%
Laurel House	64%	20%	9%	3%	4%
Kelly Hollow	33%	22%	22%	11%	11%
Onteora Lake	28%	10%	7%	14%	41%
Overlook	46%	21%	7%	5%	21%
Prediger Road	48%	26%	4%	9%	13%
Rider Hollow	60%	20%	20%	0%	0%
Spruceton	44%	33%	0%	11%	11%
Steenburgh	56%	16%	16%	9%	3%

Table 6 shows visitors' activities during their visit. The majority of visitors (67%) indicated that they participated in hiking during their visit; 13% indicated that they were doing "other" activities such as "looking for a view," or looking for a significant feature in the landscape, such as a waterfall.

Table 6. Visitors' activities at the trailheads (N = 352).

Activity	Percentage of Respondents
Day hiking	67%
Other	13%
Mountain biking	7%
Backpacking and camping	5%
Walking my dog	5%
Access for fishing	2%
Trail running	2%
Boating access	<1%

Respondents' Perceptions of Risk

Respondents were asked two questions concerning risk: 1). "How much risk to your personal health and safety do you think is involved in using this trail?" and 2). "How much risk to the health and safety of the other individuals in your group do you think is involved in using this trail?" The average respondent to both questions perceived the risk to be "slight" (N = 352 for both questions). Trailhead areas where users perceived the risk to their personal health and safety to be higher had higher sign-in rates (Table 7; Figure 4). In addition, an important (but not significant; p = .099) difference was found between users who signed-in at a registry and those who did not. Specifically, trailhead users who signed-in were more likely to perceive the risk to the health and safety of individuals in their group to be slightly higher than those who did not sign in. This slight difference was not found between those who signed in and those who did not for respondents' perception of risk to their own personal health and safety. Those who travel in groups (such as families with children) may be more likely to sign in. There was no significant correlation between the proportion of visitors who signed in at a trailhead registry and the respondents' perceived risk to self (r = .050; p = .356; N = 347), or perceived risk to others in their group (r = .033, p = .569; N = 303).

Table 7. Percentage of perceived risk to self at each trailhead location (N = 352). Percentages above 20% are in bold.

	Level of perceived risk to self					
Location	No risk	Slight risk	Moderate risk	High risk	Extensive risk	
Alder Lake	65%	35%	0%	0%	0%	
Ashokan High Point	47%	40%	13%	0%	0%	
Big Hollow	17%	61%	22%	0%	0%	
Elm Ridge	15%	47%	35%	0%	3%	
Laurel House	25%	60%	15%	0%	0%	
Kelly Hollow	56%	44%	0%	0%	0%	
Onteora Lake	42%	48%	10%	0%	0%	
Overlook	30%	63%	7%	0%	0%	
Prediger Road	13%	52%	30%	3%	0%	
Rider Hollow	60%	40%	0%	0%	0%	
Spruceton	22%	56%	22%	0%	0%	
Steenburgh	19%	62%	19%	0%	0%	
Average	28%	55%	16%	<1%	<1%	

Respondents' Perceptions of Difficulty

Respondents were asked one question concerning trail difficulty: "How difficult do you perceive this trail to be for hiking?" The average respondent perceived the trail they were hiking that day to be easy to moderately difficult (N = 351; Table 8; Figure 4). A significant difference in perception of trail difficulty (p = .032) was identified between those who signed-in at the registry and those who did not. Specifically, those who signed in at the registry perceived the trail's level of difficulty to be higher than those who did not sign in. Users who perceive a trail to be difficult may be more likely to sign in. A small but significant correlation was found between the proportion of visitors who signed in at each trailhead registry and the respondents' perceptions of trail difficulty (r = .205; p < .001; N = 346)

Table 8. Average respondents' level of perceived trail difficulty (N = 351). Data are presented using the following scale: 1 = very easy, 2 = easy, 3 = moderate, 4 = difficult, and 5 = very difficult.

Trailhead Name	Average perceived difficulty
Alder Lake	1.68
Ashokan High Point	2.67
Big Hollow	2.84
Elm Ridge	2.74
Kelly Hollow	2.00
Laurel House	2.38
Onteora Lake	2.04
Overlook	2.70
Prediger Road	3.17
Rider Hollow	3.00
Spruceton	3.11
Steenburgh	2.73

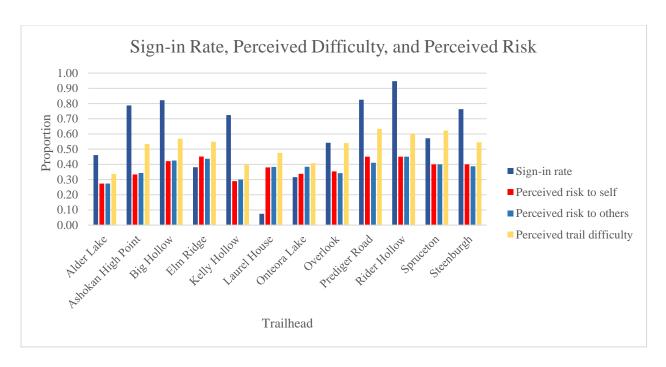


Figure 4. Graph of proportion of users who signed in at each trailhead registry (i.e., sign-in rate), and an index of respondent's perceived level of risk to self, perceived level of risk to others in their group, and perceived level of trail difficulty. Data are presented on a scale of 0 to 1.0, with 1.0 indicating the highest levels.

Visitors' Perceptions of Trail Sign-in Stations

Tables 9 and 10 show the percentage of visitors who indicated their level of agreement with specific statements about trail registries. Most visitors agreed or strongly agreed with the statements, inferring that people do believe that trail registries are beneficial to their health and safety, to the health and safety of friends and family, and to the DEC for estimating trail use and determining funding allocation. In addition, there was a significant difference between those who signed-in at registries and those who did not (p < .01) for all statements in Tables 9 and 10. Specifically, on average, those who signed in tended to agree more strongly with each statement than those who did not sign in.

Table 9. Percentage of visitors according to their perceptions of using trail sign-in stations in the Catskill Park (N = 344). Percentages above 20% are in bold.

I believe that using trail sign in stations in the Catskill Park	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
will keep me safe on trails.	3%	5%	16%	44%	32%
is always important, whether I am familiar with a trail or not.	2%	5%	15%	40%	38%
Reduces the health and safety risks associated with using a trail.	2%	9%	16%	42%	32%
is always necessary, no matter the difficulty level of a trail.	2%	8%	21%	36%	33%
helps park managers estimate how many people are using the trails.	<1%	2%	7%	37%	53%
provides the information necessary for search and rescue operations.	1%	<1%	6%	35%	57%
provides the information necessary for prioritizing trails for maintenance and repair.	1%	1%	11%	39%	47%

Table 10. Percentage of visitors according to their perceptions of trail sign-in stations in general in the Catskill Park (N = 345). Percentages above 20% are in bold.

Trail sign-in stations are	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
an important feature of trails in the Catskill park.	<1%	4%	16%	41%	39%
a good thing to have at all trailheads in the Catskill Park.	1%	3%	9%	44%	43%
necessary to have at all trailheads in the Catskill Park.	2%	8%	18%	36%	37%
Necessary for keeping visitors safe in the Catskill Park.	1%	5%	15%	42%	37%
necessary for the management of trails in the Catskill Park.	<1%	4%	12%	43%	41%

Discussion

Trailhead registries provide the DEC with important information that can be used for search and rescue operations, trail use monitoring, and allocating resources for funding and staff time to high use areas. The results of this study have several important implications for management. First, the number of sign-ins does not accurately indicate the actual number of visitors that trails are receiving. According to survey results, the trailheads sampled in the Catskill Park currently have an overall registry sign-in rate of about 46%; the sign-in rate according to observational data was 56% (excluding the Laurel House trailhead with its extremely low sign-in rate). Low registry sign-ins at locations receiving high use could provide the DEC with inaccurate perceptions of the management needs at these sites. For example, road-side parking was observed as an issue at Kaaterskill Falls (Laurel House trailhead), where only 7% of visitors (i.e., 235) were accounted for in the registry on survey days. The parking lot would fill and visitors would start parking along the road where signs clearly stated "no parking". This illegal parking created problems for emergency and service vehicles trying to access the trailhead. Trail registry information in this case did not nearly account for the actual number of visitors to the trailhead.

Second, low sign-in rates may be related to visitors' activities, perceptions of risk, number of other visitors at the site, and perceptions of trail difficulty. Kaaterskill Falls (Laurel House trailhead) and Onteora Lake are highly frequented areas but had some of the lowest sign-in rates. These low sign-in rates could be due in part to the activities in which visitors are engaged. For example, many of the visitors at Kaaterskill Falls and Onteora Lake go to swim or relax by the water; their perceptions of risk may be lower for these activities than they would be if they were hiking. In addition, both regression and correlation results from this study reveal that having a large number of other people at a trailhead appears to reduce the sign-in rate, possibly because it reduces the perceived risk for some visitors at the site and/or physically prevents visitors from signing in. It is also possible that the low sign-in rates at popular trailhead areas are related to where visitors are coming from and their previous experience with the outdoors. Many of the people visiting Kaaterskill Falls, for example, are from New York City; they may be unaware of how registries are used for search and rescue efforts, and of the risks associated with using trails in general.

Third, the use of sign-in registries varies between trailheads, and appears to be somewhat influenced by the remoteness of the site and the number of visitors. For example, Ashokan High Point, Rider Hollow, and Kelly Hollow were the three least-visited trailheads, but had the highest percentage of sign-in rates of all locations sampled. All three of these locations have small parking lots, where users often see only one to two other vehicles during their visit. Although no visitors at these three locations indicated that they felt the risk to their personal health and safety was above moderate, it is likely that the feeling of solitude and lack of foot traffic at these trailheads influenced people to sign-in. Visitors may be less concerned with signing in when there is a higher number of vehicles in the parking lot and more interaction with other visitors is taking place on the trail or at the trailhead.

Conclusion

Public education and outreach that stresses how using trail registries may be beneficial to visitor health and safety, and site management, and could be useful for increasing sign-ins. Trail registries within the Catskill Park, though used by approximately half of visitors, are not achieving their full potential. Visitors' perceptions of risk to themselves and their group, trail

difficulty, and number of other users at the site, as well as the realization that signing in could help the DEC with management, all affect registry sign-in rates. The main reasons that users do not sign trail registries are simply that they do not know that registries exist and do not understand the importance of signing in. To encourage the use of trail registries, public education and outreach can be focused on educating visitors about the benefits of signing-in at trailhead registries, as well as at other locations within the Catskill Park (e.g., Catskill Center, Catskill Visitor Center, local businesses). It would also be beneficial to have information about the impacts of trail registries on the DEC website so that visitors can see the information before they visit a trailhead. Educating the public on the use of trail registries is the best option for increased registry use in the future, leading to more accurate visitor estimates and management that better accommodates visitor numbers in the Catskill Park.

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Literature Cited

DEC.ny.gov. (2020). *New York's Forest Preserve - NYS Dept. of Environmental Conservation*. Available at: https://www.dec.ny.gov/lands/4960.html [Accessed 24 Feb. 2020].

Archer, L. (2017). Trail Use within the Catskill Forest Preserve, New York State. pp. 1–9.

Appendix A. Visitor survey.

Visitors' Perceptions of Trail Registries in the Catskill Park

I. Let us know a little a	bout your perception	ons of this trail:		
☐ Alder Lake ☐ Ashokan High Point ☐ Big Hollow ☐ Elm Ridge	_ _ _	you are completing this sur Laurel House Kelly Hollow Onteora Lake Overlook	☐ Prediger Ri☐ Rider Hollo☐ Spruceton☐ Steenburg	oad ow h
2. How many times had ☐ 1 time only	ve you used this trai 2 to 3 times	l in the past five years (i.e., s ☐ 4 to 5 times	since 2015) including to ☐ 6 to 10 times	day? Check one box only. ☐ 11 or more times
3. How difficult do you ☐ Very easy	perceive this trail to Basy	be for hiking? Check one b Moderate	oox only. □ Difficult	☐ Very difficult
4. How much risk to yo ☐ No risk	our personal health a	and safety do you think is ir ☐ Moderate risk	nvolved in using this trai High risk	I? Check one box only. ☐ Extensive risk
5. How much risk to th trail? Check one box or I No risk	nly. □ Slight risk	of the other individuals in	your group do you think ☐ High risk	is involved in using this
6. What is the primary ☐ Day hiking ☐ Access for fishing ☐ Walking my dog		ed this trail today? Check on Trail running Backpacking and camping Mountain biking	e answer only. Geocachin Boating ac Other (spe	cess
7. a. Did you sign-in at anonymous, and will r ☐ Yes (Go to question	not be connected to	on during this visit? Your ca your identity in any way. \(\text{No} \) (Go to question		ated, will be kept
☐ Signing in is impor ☐ It only takes a mir ☐ Signs near the reg	rtant for my safety a nute to sign in. gistry indicated that	during this visit? Check all the nd/or the safety of others in a needed to sign in. I needed to allocate func	n my group.	anagement.
☐ Someone else in r ☐ I was anxious to g ☐ The others in my ☐ I don't want othe ☐ Signing in is not n ☐ Signing in is not n ☐ Signing in is not n	my group signed in force started on the trace group didn't want to receive trail users to see mecessary since I have ecessary since this is in portant to me and, and Separtment of E	ail and didn't want to take the take the time to sign in. By personal information. Be used this trail before. Be an easy trail. By is a waste of my time. By invironmental Conservation	ne time to sign in.	formation.
8. How often do you u		for recreational purposes ea	ch year? Check one ans ☐ 11 to 20 times	wer only. 21 or more times
9. With whom are you ☐ Friends ☐ Other (specify):	☐ Family	y? Check all that apply. ☐ Club/Organization	☐ School group	☐ No one else

[Turn over page for other questions!]

II.Let us know a little about your perceptions of trail sign-in stations in general:

10. To what extent do you agree or disagree with the following **beliefs** regarding trail sign-in stations in the Catskill Park? Please circle the number that corresponds with your answer.

I believe that <u>using</u> trail sign-in stations in the Catskill Park	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
will keep me safe on trails.	-2	-1	0	1	2
is always important , whether I am familiar with a trail or not.	-2	-1	0	1	2
reduces the health and safety risks associated with using a trail.	-2	-1	0	1	2
is always necessary, no matter the difficulty level of a trail.	-2	-1	0	1	2
helps park managers estimate how many people are using the trails.	-2	-1	0	1	2
provides the information necessary for search and rescue operations.	-2	-1	0	1	2
provides the information necessary for prioritizing trails for maintenance and repair.	-2	-1	0	1	2

11. To what extent do you agree or disagree with the following items regarding trail sign-in stations in the Catskill Park? Please circle the number that corresponds with your answer.

Trail sign-in stations are	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
an important feature of trails in the Catskill Park.	-2	-1	0	1	2
a good thing to have at all trailheads in the Catskill Park.	-2	-1	0	1	2
necessary to have at all trailheads in the Catskill Park.	-2	-1	0	1	2
necessary for keeping visitors safe in the Catskill Park.	-2	-1	0	1	2
necessary for the management of trails in the Catskill Park.	-2	-1	0	1	2

III. Let us know a little mo	ore about yourself:			
12. How many people are	in your group today,	including yourself?	lumber:	
13. What is your gender? ☐ Male ☐	Check one answer on I Female		☐ Other	☐ Prefer not to say
14. What year were you b	orn? Year:			
15. In which country and Country:		a /a .	nce:	
16. How many years of e e each year of technical and Years of education:	d/or college training a	fter.		ool through high school, plus
17. What is the total hou	sehold income per ye	ar for all earners in ye	our household (option	onal)? Check one answer only
□ \$0 - \$24,999	□ \$25,000 - \$49,9	99 🗆 \$50,000	- \$74,999	\$75,000 - \$99,999
□ \$100,000 - \$124,999	\$125,000 - \$149	9,999 □ over \$15	0,000	

Thank you for helping us with this study!