
Understanding Trail Cultures through Various Stakeholders of the Trail

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Abstract

In this position paper, we explore the cultural issues associated with HCI outdoors. If we describe an enthusiasm for trail life and the outdoors as “trail culture”, then we need to be aware of the different subcultures within trail culture. The hiking community has a variety of stakeholders who have different values and motivations for being on the trail. Each grouping of stakeholders has their own culture. These cultures should be explored to understand if or how HCI should be used on trails. In this paper, we provide examples of different trail cultures and ways that trail cultures can be studied.

Author Keywords

Culture; social media; social computing; community

ACM Classification Keywords

J.4 [Social and Behavioral Sciences]: Computer Applications.

Introduction

Triple Crown veteran Karen Berger wrote an essay on *SectionHiker.com* reflecting on her thru-hiking experiences on the Appalachian Trail, Pacific Crest Trail, and Continental Divide Trail and mused “each one is different; each has a soul” [2]. As she compared and contrasted each trail, it became evident that the differences between

the trails went beyond the physical differences (e.g., trail mileage, geographical location, wildlife, etc.). The differences seemed to be cultural. It seemed that there were subcultures within the culture of trail life. In an earlier study, which will be further explained in the Data Analysis section, there was a definitive difference between the Appalachian Trail and the Pacific Crest Trail. To further pursue the study of cultural differences among the trails, we are looking at the cultures of different stakeholders on the trails.

Within the trail community, there are a variety of stakeholders who have different motivations for being on the trail, and who value different aspects of trail life. At the ACM GROUP 2018 Technology on the Trail workshop, Michael Horning, Professor in Virginia Tech's Department of Communication, and Lindah Kotut, a Ph.D. student in Computer Science at Virginia Tech, held an activity in which participants clustered different stakeholders of technology on the trail (e.g., thru-hikers, section hikers, day hikers, trail angels, ridge runners, park rangers, farmers, families, etc.) and examined the similarities and differences in their values and goals [3]. Do these stakeholders have different trail cultures that lead to their differences in values and goals? If so, these cultures should be studied and considered when designing HCI to be used on the trail.

Examples from Backpacking Culture

When many people imagine the stereotypical hiker, they may picture a hiker with days worth of gear strapped to their back, such as the hikers depicted in Figure 1. These hikers are called backpackers. Some backpackers may go out for a few days at a time (section hikers), while the more devoted may go out for several months at a time to complete a thru-hike. Whether a backpacker is out for a

50 mile hike over a 3 day period or spending months thru-hiking all 2,190 miles of the Appalachian Trail, backpackers are a devoted group of hikers with their own unique culture.

In a reflective article comparing modern backpacking to backpacking in the 1970's, Jeffrey Marion writes, "No backpacker with a few thousand miles under his feet fails to consider the weight of every packed item. The ultra-light paradigm places greater focus on a new array of light-weight gear, your knowledge and skills, and doing without" [4]. Managing trail weight is a common culture in backpacking. There are extreme practices like shortening the handle of a toothbrush or repackaging food to lessen the weight of the backpack. Such practices seem extreme to those outside of the backpacking community. The term "comfort item" is often used by backpackers to refer to items considered "non-essential," that make the backpack heavier than it needs to be. However, when backpackers discuss bringing a 1-pound camping chair or a warmer, fluffier (i.e., heavier) sleeping bag because it makes their trail experience more enjoyable, the untrained ear may struggle to understand how the difference between a 29-pound backpack and a 30-pound backpack could cause such a disturbance to a physically fit backpacker. In the backpacking community, the notion of spending an extra \$100 on a smaller tent is justifiable if it means reducing trail weight. Figure 2 shows a comparison of two backpacking tents. Both are 2-person, 3-season, and made by Big Agnes. The main difference between the Fly Creek and the Frying Pan is that the Fly Creek weighs about half as much as the Frying Pan, and accordingly costs an extra \$140. Oftentimes, in backpacking culture, saving the 2+ pounds in trail weight is well worth the \$140.



Figure 1: Jeffrey Marion on a reunion thru-hike on the Appalachian Trail [4]



			
	Big Agnes Fly Creek HV UL 2 Tent	Big Agnes Frying Pan SL2 Tent With Footprint	
	\$389.95	\$249.95	
	Shop item	Shop item	
	Remove	Remove	
Reviews	★★★★☆	★★★★☆	hide
Best Use	Backpacking	Backpacking	hide
Seasons	3-season	3-season	hide
Sleeping Capacity	2-person	2-person	hide
Minimum Trail Weight	1 lb. 15 oz.	4 lbs. 5 oz.	hide
Packaged Weight	2 lbs. 5 oz.	5 lbs. 5 oz.	hide
Packed Size	4 x 19 inches	18 x 7 inches	hide

Figure 2: Comparing two 2-person backpacking tents by Big Agnes on REI.com

Examples from Conservation Culture

The outdoor spaces that are so loved and coveted by trail enthusiasts are protected by hikers and conservancy organizations. One well-known conservancy organization is the Leave No Trace Center for Outdoor Ethics. Practicing Leave No Trace is common in the conservation culture. Practices as common as “pack-it in, pack-it out” are part of Leave No Trace. Other less visible practices such as digging cat-holes (holes for solid human waste that are dug 4-6 inches in diameter and 6-8 inches in depth) 200 feet from the trail and water sources, or minimizing visible impact after camping in pristine areas, also are part of Leave No Trace, and thus conservation culture [1].

Data Analysis

We have made efforts toward understanding the different trail cultures through data analysis. From January 2017 to January 2018, we collected over 1.5 million tweets from

trail enthusiasts. Some tweets are by backpackers, day hikers, conservancy organizations, and outdoor outfitters. In May of 2017, we separated the tweets based on which Triple Crown Trail they were about. Figure 3 shows results from topic analysis of our data using LDA.

The tweets about the Pacific Crest Trail were very related to logistics and planning hikes. One of the topics was resupply tips in California; another topic was about acquiring Danner hiking boots (Figure 1) at an Outdoor Research show – Danner is renowned for making durable hiking boots, and Outdoor Research is a very reputable company specializing in outdoor gear. There was also a Pacific Crest Trail topic about hikers taking months off from their jobs to complete their thru-hike. Since northbound hikers will typically start their thru-hikes between mid-April and early May, it makes sense that the tweets written in the months leading to the peak weeks for beginning a Pacific Crest Trail thru-hike would be about planning the logistics of a thru-hike (i.e., where to resupply in California, where to acquire gear, taking time off from work).

The Appalachian Trail community’s tweets were more reflective of in-the-moment experience on the trail. One topic referred to McAfee Knob — an iconic lookout point on the Appalachian Trail. There was a topic about watching the sunrise on an Appalachian Trail backpacking trip in the Catawba Valley in Virginia, and another topic describes a woman’s hiking trip. There could be a variety of reasons for the difference in the topic themes between the Appalachian Trail communities and the Pacific Crest Trail communities. Appalachian Trail thru-hikes usually begin around March; by May, it is possible that a majority of the tweets were made by hikers who had already begun their thru-hikes, whereas many of the Pacific Crest Trail

hikers were just starting. Another possibility is that there is a higher concentration of Pacific Crest Trail hikers who would tweet about thru-hike planning. On the other hand, while there are many hikers who attempt to thru-hike and section hike the Appalachian Trail, the Appalachian Trail is also popular among casual day hikers. It is possible that there are just a lot of day hikers tweeting about their day on the trail.

Understanding the differences between the hikers on these trails, and understanding the differences in culture and values of the Triple Crown Trail communities, are aims of the research. Further, now that we have almost twelve months of data on the Triple Crown trails, it is becoming feasible to launch a month-by-month study on the topics found in each trail to devise a seasonal model for topics that are discussed by backpackers.

Future Work

From speaking to forestry specialists and studying samples of tweets from our dataset, we have found less traditional examples of trail culture, that we plan to study. Jeffrey Marion, founding member of the Leave No Trace board of directors and research biologist, expressed an interest in understanding the small group of hikers who actively avoid Leave No Trace practices — hikers who refuse to pack out their trash, refuse to dig cat-holes, and insist on burning their leftover food. Understanding their motivations to ignore conservation practices could aid in educating them on the importance of conserving the land that they are enjoying during their hike.

Studying tweet samples also led us to a large number of tweets about nudity on the trail. These tweets had words and phrases like “nude”, “naked”, and “as nature intended”. There has been an interest in understanding

why people want to hike in the nude, and furthermore, why they publicly talk about hiking in the nude.

We expect to find other topics and issues, and to integrate our findings from interviews with those from data analysis, to develop a deeper understanding of trail cultures.

	Appalachian Trail Topics	Pacific Crest Trail Topics	Continental Divide Trail Topics
Topic 1	#indigenous, #tairp, #amerianindian8, day, knob, mcafee, trailva	California, #pct2017, 2, story, tips, resupply, #pics	help, #bravethedct, #hikecdt, today, @cdnst1, vote, great
Topic 2	va, catabwa, sunrise, halfway, #backpacking, just, oc444x2400	@pctassociation, like, today, #lwcf, win, did, great	#bravethedct, @cdnst1, #hikecdt, help, great, support, today
Topic 3	days, amp, long, mountain, complete, miles, week	mount, adams, goat, rocks, #hogansog, washington, view	#bravethedct, help, today, @cdnst1, support, vote, great
Topic 4	#travel, #bestseller, black, 1, awol, books, 2	#orshow, booth, gear, come, free, #pct2017, @danner	#bravethedct, help, today, great, @cdnst1, support, #hikecdt
Topic 5	new, going, woman, 80yearold, solo, sisters, twin	wild, lost, #travel, #bestseller, oprahs, #7, #8	#bravethedct, #hikecdt, @cdnst, support, help, great, today
Topic 6	hiker, #at2017, @thetrekat, 5, update, thruhiker, thruhikers	taking, #backpacking, months, job, better, 4, day	#hikecdt, #bravethedct, @cdnst1, great, help, support, today
Topic 7	#at2017, @thetrekat, #trail, gear, list, things, #photography	#pctdays, new, instagram, year, weeks, posts, bitesized	help, #bravethedct, today, #votecdt, vote, 25k, @cdnst1

Figure 3: Results of early topic analysis.

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