



# A Walk in the Woods: A Social-Ecological Approach to Managing Health Outcomes in Parks and Protected Areas

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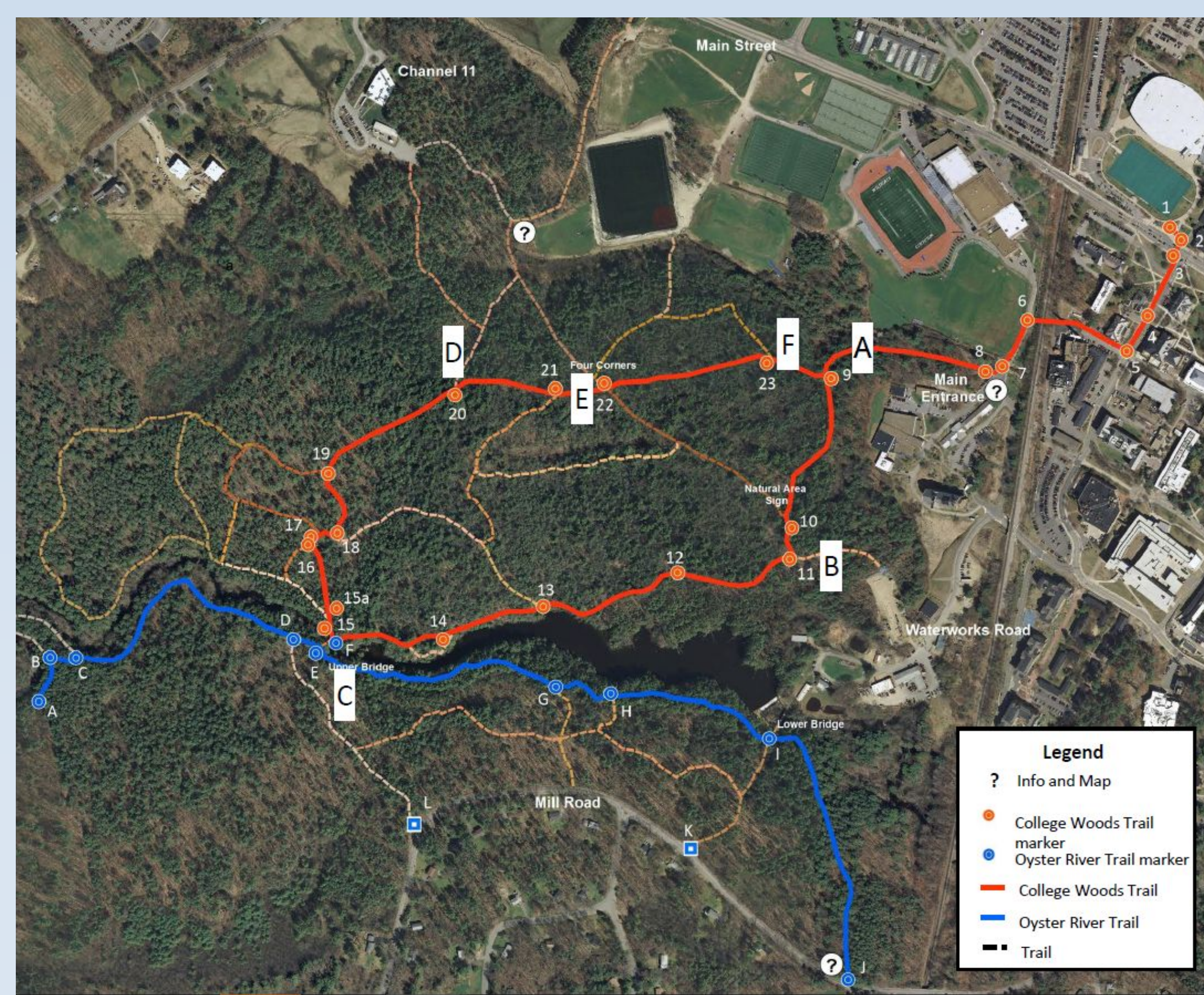
\*Generous study funding provided by Healthy UNH



## Background and Purpose

- College Woods is an invaluable 250-acre UNH property and resource for education, research, and outdoor recreation that is open to the general public.
- In 2016, the primary path, the College Woods Trail, was designated as part of the Healthy UNH initiative, and subsequent signage was installed.
- This study addressed the need to determine overall recreation visitation, satisfaction, motivations, and experience use history among visitors. Of particular interest was the influence of the Healthy UNH signage on visitation and the influence of social, situational, and ecological factors upon visitors' health outcomes and overall satisfaction.

Figure 1. College Woods Trail Map



## Research Questions

- R<sup>1</sup>:** To what extent are visitors attaining health outcomes at CW?
- R<sup>2</sup>:** To what extent are visitors impacted by social, situational, and ecological factors at CW?
- R<sup>3</sup>:** What is the relationship between influencing factors, health outcomes, and overall satisfaction at CW?
- R<sup>4</sup>:** What is the influence of social, situational, and ecological factors upon health outcomes at CW?

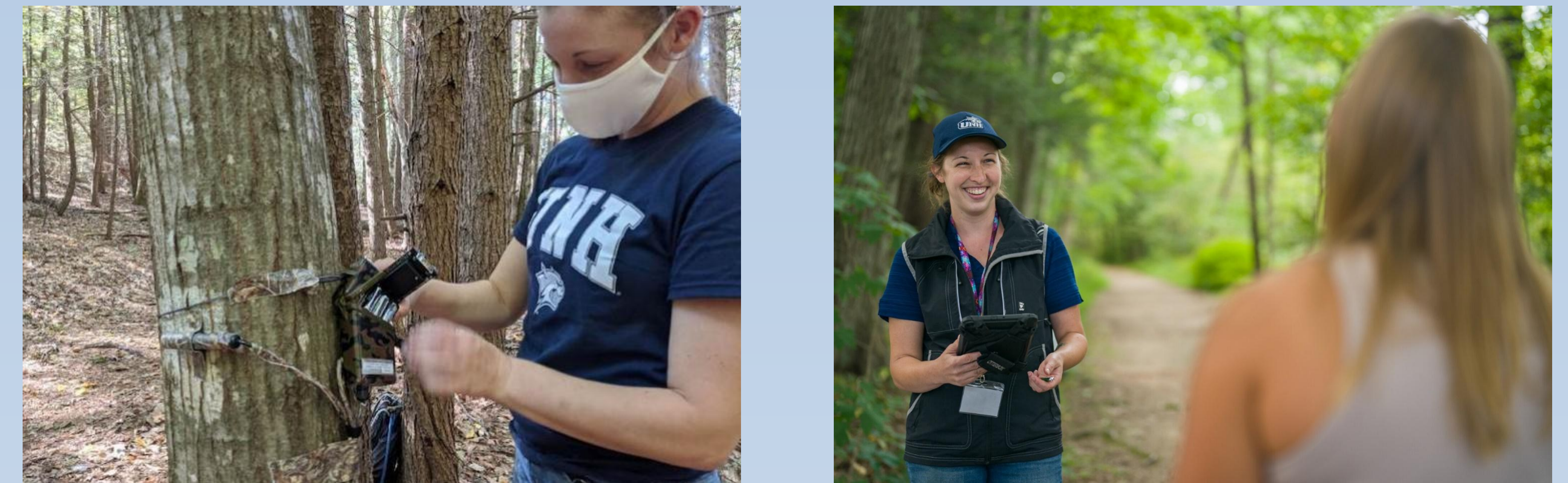
## Methodology

- On-site intercept survey
- 6 survey locations at entry/exit points
- A 12-month systematic sampling plan stratified by days of the week, times of the day, and seasonality.
- Data collection occurred between September 2020-21 with a total of 539 completed surveys; representing an 86% response rate.

Table 1: Visitor Use by Season

<b>Total (9/1/20 – 8/31/21)</b>	<b>74,192 visits</b>
Fall (9/1/20-11/30/20)	27,496 visits
Winter (12/1/20-2/30/21)	13,271 visits
Spring (3/1/21-5/30/21)	20,718 visits
Summer (6/1/21-8/30/21)	12,707 visits

Figure 2. Data Collection in Process



## Results & Key Takeaways

- The average visitor in the sample was a 30-year old, highly-educated, white, male, who was politically moderate, 8 years of CWT usage, and was highly experienced.
- Visitors reported strong health outcomes as a result of using the CWT, notably in overall health, life appreciation, and stress reduction.
- Visitors expressed exceptionally high satisfaction and place attachment levels as well as low levels of perceived conflict and/or crowding.
- Structural equation modeling (SEM) suggests social, situational, and ecological factors influenced overall experience quality in CW (Fig 3).
  - However, health outcomes mediated the relationship between social and situational factors upon satisfaction; yet, ecological factors had no relationship with health outcomes and directly influenced satisfaction.
- This study demonstrates the tremendous health benefits of equal and open access to parks and protected areas, especially during a pandemic.

Figure 3. SEM Model

