



**OUTDOOR  
RECREATION AND  
FOREST HEALTH:  
CURRENT  
REGIONAL  
PERCEPTIONS AND  
FUTURE  
MONITORING  
NEEDS**

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# Executive Summary

To support the study exploring impacts to forest health from outdoor recreation, regional experts and stakeholders were interviewed to identify ongoing monitoring efforts and key questions for future research. Fifteen individuals were interviewed from states in the region, including Maine, Vermont, New Hampshire, New York, Rhode Island, and Connecticut. Although there is concern for the impact recreational uses have on the health of eastern forests, efforts to monitor these impacts are not typically being pursued. This is primarily due to a lack of funding, staffing, or large forested areas to monitor. Regional stakeholders and land managers are interested in future projects that provide direct recommendations, transferrable results, and a community with shared values to work with.

# Introduction and Methodology

To expand perspectives captured in an exploratory study investigating connections between outdoor recreation and forest health, individuals involved in the management of regional forests were contacted for interviews and possible data sources. Regional experts and stakeholders were interviewed to identify efforts monitoring this connection and key questions for future research. Fifteen individuals agreed to interviews during the spring and summer of 2022, including public and private land managers, foresters, land trust representatives, and education and outreach professionals. Interview questions came from a pre-existing guide, including:

- ◇ *How do you perceive the interaction between forest health and recreation?*
- ◇ *What do you see as the most important concern to forest health from recreation activities?*
- ◇ *What types of recreation do you see as most impactful to forest health?*
- ◇ *What questions would you want to ask about the interaction between forest health and recreation?*
- ◇ *What are important metrics for measuring impacts?*

A contact log was kept in a Microsoft Excel spreadsheet to document interviewee contact information and lay groundwork for a future network of collaborators. Interview responses were recorded in a Microsoft Word document and transferred to an Excel spreadsheet to code for themes and assess results. Although many interviewees are aware of forest health impacts from recreation, few systematically monitor and document impacts in the region. The following lists capture primary perceived areas of impact and concern discussed across interviews.

## Outcomes and Findings

### ***PERCEIVED AREAS OF IMPACT FROM OUTDOOR RECREATION***

#### **Spread of Invasive Species**

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The spread of invasive plants, pests, and diseases was the most common topic across interviews. The movement of invasive plants and pests is a perceived result of many recreational activities and negatively impacts forest health. Camping is identified as the primary recreational use responsible for the spread of invasive species, through the transportation of firewood and camping gear. Hiking boots, mountain bikes, and All-Terrain Vehicles (ATVs) are also perceived to mediate outbreaks via seed dispersal.

#### **Carrying Capacity**

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The capacity of forest trails being used by recreationalists was another major topic of conversation. This includes the quantity of trails in the forest (and resulting forest fragmentation), as well as the quality of the trail and recreational experience (i.e., widening, erosion, congestion from users, user conflict). Capacity was also discussed in the context of parking and transportation when visitors at popular trailheads park along major roadways and create safety hazards. Reservation systems appear to be alleviating pressures on this front at high use destinations. These reservation systems and trail user logs may be useful sources of data moving forward.

## Misuse of Trail Networks

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Off-trail use, trespassing, cutting trees to create new trails, and illegal ATV use were significant concerns for several interviewees. Illegal ATV use is becoming a greater problem that is difficult to address with limited funding, staffing, and large forested areas to patrol. Dogs off-leash are also a management problem that is perceived to negatively impact wildlife and other dimensions of forest health.

## ***FUTURE MONITORING NEEDS AND RESEARCH OPPORTUNITIES***

Other impacts that were mentioned less frequently include changes in vegetation, wildlife interactions, and negative effects to wildlife habitat. Given these perceived impacts, experts and stakeholders are interested in some practical outcomes of future monitoring and research. This will be a challenge considering the variety of forest types, sizes of forest tracts, proximity to urban areas, and recreational uses that occur in the forests of the Northeast. The following short list captures desired outcomes of future FEMC projects expressed in interviews.

## Working Groups

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The topic of outdoor recreation and forest health was of great interest to most interviewees. Convening to hear from other professionals who work with and manage forests will be useful to continue conversations around this topic and monitor long-term trends. Sharing concerns and insights with a community that holds similar values will be useful for future monitoring and research efforts.

## Direct Recommendations

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Land managers would like to hear more about best practices and solutions to social and ecological problems experienced in forested landscapes. For example, managers are interested in education and outreach that changes or influences user behavior. Recommendations may arise from the Working Group.

## Transferable Results

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Several interviewees cited published literature as rationale for managing their forests. However, limited datasets and resources are currently available that illustrate impacts from outdoor recreation in eastern forests. Additional research and data collection would be useful for regional land managers, particularly about the carrying capacity of forests and spread of invasive species. This could take the form of a pilot case study, or a continuation of existing research to determine long-term trends. Future research on these topics should take into consideration how results can be used in and transferred to different forest types and user groups across the region.