

OUTDOOR RECREATION AND TOURISM

OVERVIEW

Climate change impacts recreation infrastructure, reshapes how people access outdoor spaces, and affects the well-being of communities and economies that depend on value generated from outdoor recreation, from visitors outside and within Vermont. In response, many outdoor recreation managers are already implementing adaptation strategies and innovative practices to mitigate the impacts of climate change on their operations, including adopting novel snow management strategies, electrifying utility vehicle fleets, and investing in shoulder and summer season activities.



\$2.2B

Value added to the economy from
outdoor recreation (4.7% GDP)
(2024)



16,682

Jobs supported by outdoor recreation
(5.1% of all jobs)



>90%

Residents recreate each year
(20% near daily)



>58%

Outdoor businesses reporting
damage from extreme weather (2023)

WINTER

Warmer temperatures are reducing season lengths for most snow and ice sports. Increasing variability in the timing, form, and amount of winter precipitation has reduced the reliability of historically consistent snowpack and ice cover (Figures 1–2). The increasing number of warmer winter nights are constraining snowmaking operations, thereby impeding existing adaptation efforts. Ice-based recreation activities are especially vulnerable to changing climate conditions, since pond, lake, and river ice cannot be artificially created. These dynamics present compounding challenges to sustaining snow sports and the businesses that depend on them in Vermont. Many ski operators are adapting through snowmaking, snowfarming (i.e., using insulated piles of preserved snow), and boosting revenue by offering year-round activities.

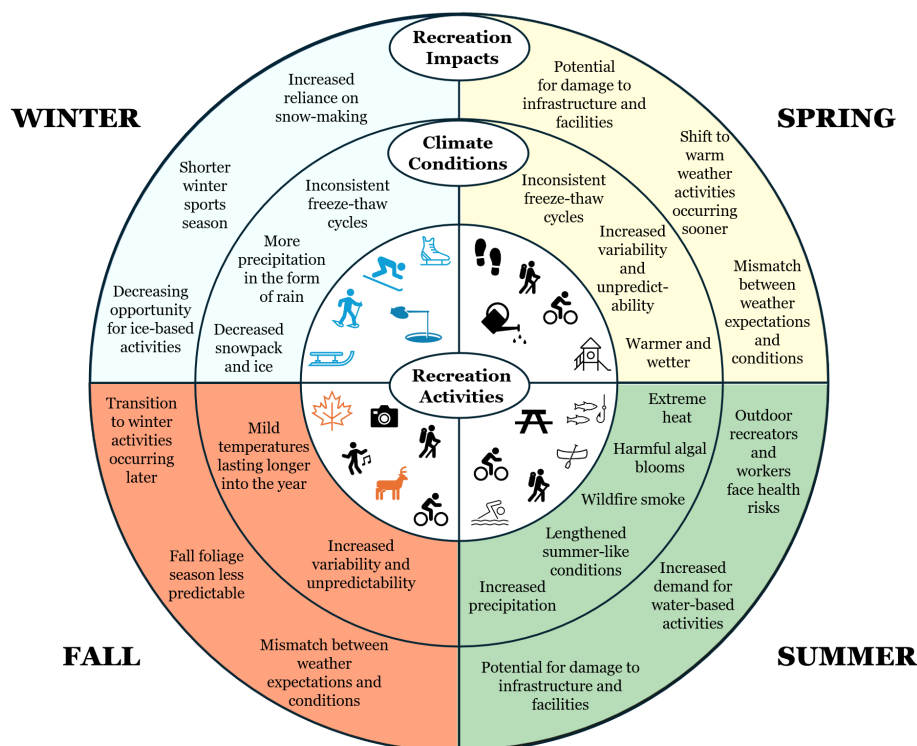


Figure 1 Key climate conditions and recreation impacts on recreation activities by season, blue or orange recreation activity symbols represent season specificity, while all other symbols represent activities that typically take place throughout the year or between spring and fall

Source: Chapter 9: Outdoor Recreation and Tourism (Muldoon et al. 2026)

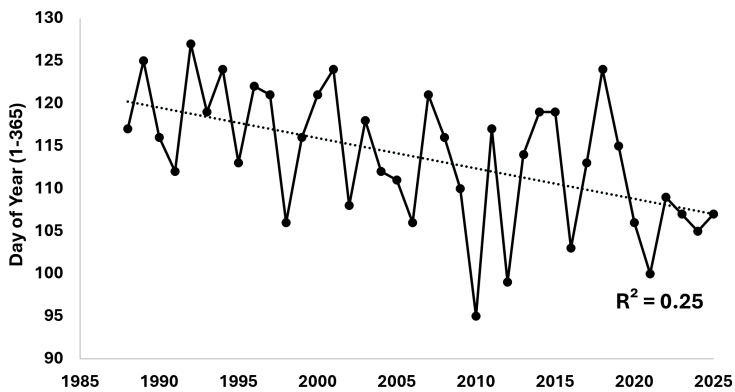


Figure 2 Day of the year (numbered from 1 to 365) when the ice at Joe's Pond melts, as recorded by a citizen-led monitoring system in place since 1988; dotted line shows the declining linear trendline

Source: Joe's Pond Association (2025)

SPRING

Fondly known as mud season by outdoor recreators, the springtime shoulder season is arriving earlier in Vermont due to climate change (Figure 1). Variable weather conditions in spring could create a mismatch between weather expectations and real conditions. For maple sugarers that count on springtime agritourism business, changing conditions may impose unpredictable year-to-year timing of established tourism events like the Maple Open House Weekend. Outdoor education campaigns should inform recreators about changing weather conditions, and focus on safety and preparedness.

SUMMER

The summer recreation and tourism season is lengthening (Figure 1). Water-based activities, like swimming, boating, and paddling are likely to become more popular as air and water temperatures rise. However, outdoor recreators should be cautious of extreme heat and heat stress, harmful algal blooms, and unsafe natural swimming areas following heavy rainfall (Figure 3). Recreation infrastructure, like hiking trails and rail trails, is also at risk of damage from climate change-related hazards like flooding. Expanding tree canopy, and thus shade, in public parks and improving public beach access and signage can help protect outdoor recreators from climate change impacts.



Figure 3 A sign communicating that a swimming area is closed due to cyanobacteria

Source: Glenn Russell via VTDigger (2025)

FALL

Vermont's renowned foliage season, which generates an estimated \$500 million annually, is particularly sensitive to shifts in temperature and precipitation (Figure 1). Warmer autumns delay the onset of foliage color change, while erratic temperature fluctuations and drought stress may cause muted or uneven coloration of leaves (Figure 4). These changing climate conditions reduce the predictability of the fall season, complicating travel planning and affecting visitation rates among tourists seeking peak foliage conditions. Greater weather variability in fall also causes challenges for hunters and hikers. Conservation and diversification of native tree species alongside management of invasive species can help protect vibrant foliage displays.

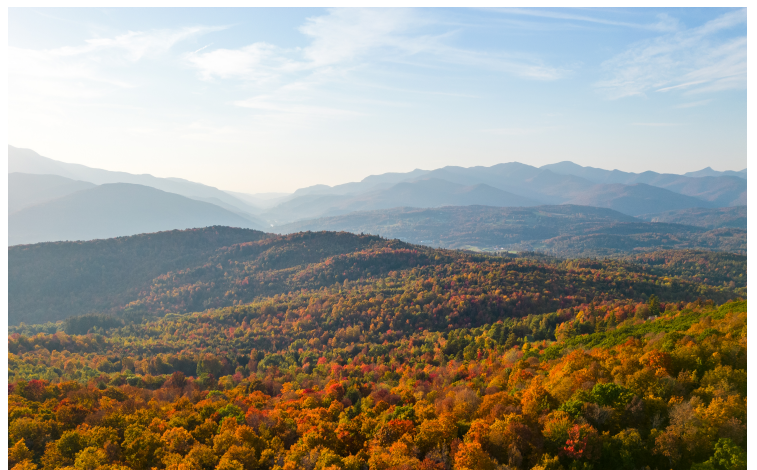


Figure 4 Fall foliage in Vermont draws visitors to the state

Source: UVM Spatial Analysis Lab (2023)