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ME State
Comprehensive
Outdoor
Recreation Plan
2014-2019

Maine
SCORP
2014-2019



ME Bureau of
Parks & Lands

Dept. of
Agriculture,
Conservation,
and Forestry





PAUL R. LEPAGE
GOVERNOR

STATE OF MAINE
DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY
OFFICE OF THE COMMISSIONER
22 STATE HOUSE STATION
AUGUSTA, MAINE 04333

WALTER E. WHITCOMB
COMMISSIONER

March 1, 2016

Senator Peter Edgecomb, Chair
Representative Craig Hickman, Chair
Joint Standing Committee on Agriculture, Conservation and Forestry
100 State House Station
Augusta, Maine 04333-0100

RE: Maine's 2014-2019 Statewide Outdoor Recreation Plan

Dear Senator Edgecomb and Representative Hickman,

In accordance with 12 MRSA §1817 paragraph 7, please find the Statewide Comprehensive Outdoor Recreation Plan (SCORP) effective for the period 2014-2019. The presentation of the Maine SCORP to the Joint Standing Committee on Agriculture, Conservation and Forestry is a requirement of the National Park Service for continued eligibility for Land and Water Conservation Fund used by the state and local municipalities for outdoor recreation projects.

This Plan includes a new consumer recreation preferences survey, the first since 1992, conducted with the help of the University of Maine. The survey was both a primary method for public input for this Plan, and a major source for its recommendations. The survey questions were framed around the central question: "How Well Are We Serving Maine's Outdoor Recreation Public?" Of the roughly 16,000 people who completed the survey, through an online survey instrument, approximately 60 percent were residents and 40 percent non-residents. The survey provides information about what the recreation preferences are for people who recreate in Maine; what recreationists identify as constraints to their participation in outdoor recreation activities; what are perceived needs for outdoor recreation opportunities in Maine; and how they view tourism in Maine.

You should find this report very informative. If you have any questions about the report please contact Rex Turner, our Outdoor Recreation Planner, at rex.turner@maine.gov or 287-4920.

Thank you,

Walter E. Whitcomb, Commissioner
Maine Department of Agriculture, Conservation, and Forestry

CC: Agriculture, Conservation and Forestry Committee, Members

PHONE: 207-287-3419



FAX: 207-287-2400

Maine State Comprehensive Outdoor Recreation Plan, 2014-2019

July, 2015

Maine Department of Agriculture, Conservation, and Forestry

Bureau of Parks and Lands (BPL)

Steering Committee

Kaitlyn Bernard	Maine Program Associate	Appalachian Mountain Club
Greg Sweetser	Executive Director	Ski Maine Association
Leif Dahlin	Community Services Director	City of Augusta
Phil Savignano	Senior Tourism Officer	Maine Office of Tourism
Jessica Steele	Director of the Outdoor Adventure Center	Unity College
James Tasse Ph.D.	Education Director	Bicycle Coalition of Maine
Greg Shute	Outdoor Programs Director	The Chewonki Foundation
Dan Parlin	President	Topsham Trailriders ATV/ Snowmobile Club
Al Cowperthwaite	Executive Director	North Maine Woods, Inc.
John Daigle	Associate Professor of Forest Recreation Management	University of Maine School Of Forest Resources
Judy Sullivan	Program Director	Maine Adaptive Sports & Recreation

Planning Team

Rex Turner	Outdoor Recreation Planner (SCORP coordinator, writer)	Maine Bureau of Parks and Lands
Katherine Eickenberg	Chief of Planning and Acquisitions	Maine Bureau of Parks and Lands
Doug Beck	Supervisor of Outdoor Recreation (LWCF program manager)	Maine Bureau of Parks and Lands
<u>Survey Research Team</u>	John Daigle	University of Maine
	Sandra De-Urioste-Stone	
	Matthew Scaccia	

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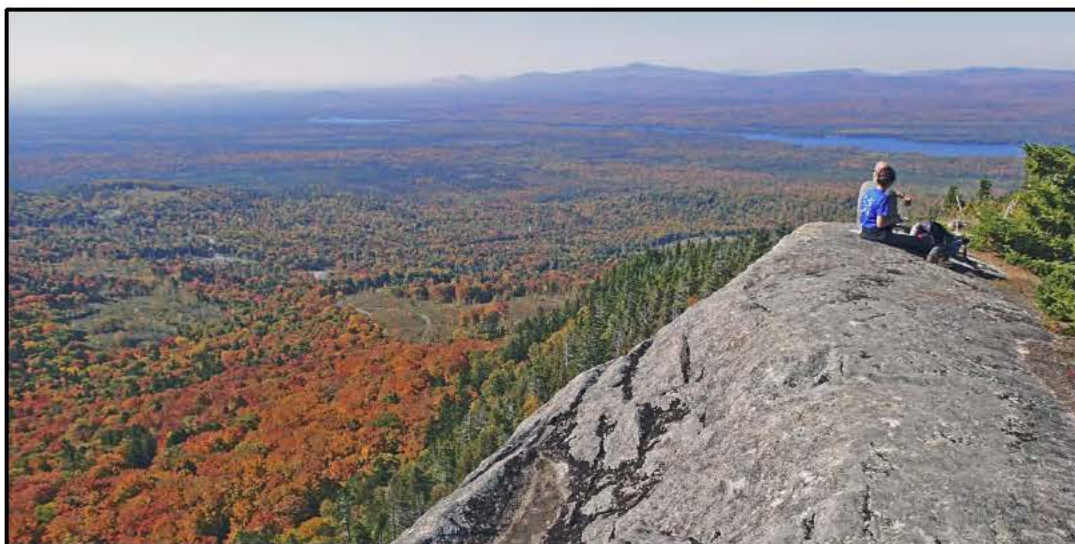
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Forward



Eagle Rock Trail, Big Moose TWP.

Maine is many things; the state encompasses bald, windswept peaks, almost endless stretches of sprawling forest lands, bucolic small towns, rolling fields, spruce-clad ocean shores, island-studded harbors, mill towns, working ports, and a whole host of other environments.

This physical beauty, rooted in the allure of deep woods, clean rivers, clear lakes, and crashing surf is intertwined with a sense of place - a tempo, a way of life. Outdoor recreation is central to this way of life. Outdoor recreation's contribution to Maine is more than a collection of swimming pools or soccer fields, though they too have their role. Outdoor recreation is a broad umbrella under which Saturday morning baseball games behind the local middle school and ten day canoe expeditions both belong - along with countless other activities. Maine life is richly imbued with opportunities to get outside and experience the benefits of nature, movement, and traditions.

There is a strong link between the special character of Maine's places and its economic, environmental, and community values. This report recognizes that "quality of place" is a driver for our recreation economy and a source of health and well-being. It therefore recognizes the fundamental need for stewardship of our natural resources and outdoor recreation infrastructure such as trails and parks. It is intended and hoped that this plan helps identify the areas in which outdoor recreation efforts can be undertaken to best serve the people of Maine and the visitors who come here to experience the outdoors. It is also hoped that the information on trends, demand, supply, and issues will be of interest to and support the work of the many diverse people and organizations that play a role in providing outdoor recreation experiences in Maine.

-Maine SCORP Planning Team.

Introduction

Land and Water Conservation Fund Program (LWCF) & Statewide Comprehensive Outdoor Recreation Plan (SCORP)

The federal Land and Water Conservation Fund program (LWCF) provides matching funds to states for statewide outdoor recreation planning and for acquisition and development of public outdoor recreation areas and facilities. From 1966 through 2013, just under \$40 million of LWCF money has been used for non-federal projects in Maine. Administered at the federal level by the National Park Service and at the state level by the Bureau of Parks and Lands (BPL) in the Maine Department of Agriculture, Conservation, and Forestry, LWCF grants can provide up to 50% of the allowable costs for approved acquisition or development projects. Municipalities, schools, the State of Maine, and tribal governments are eligible to apply for local LWCF grants through BPL.

- “Established by Congress in 1965, the LWCF comprises revenue generated from offshore oil and gas leasing, not taxpayer dollars. The federal portion of the LWCF is used to acquire lands, waters, and interests therein necessary to achieve the natural, cultural, wildlife, and recreation management objectives of the NPS and other federal land management agencies.”¹
- “Over 40,000 grants to states and localities have been approved under the LWCF grants program for acquisition, development and planning of outdoor recreation opportunities in the United States.”²

State participation in LWCF requires preparation of a Statewide Comprehensive Outdoor Recreation Plan (SCORP), and approval of the plan by the National Park Service (NPS). The LWCF Act requires an approved SCORP to include the following requirements of Chapter 630.1 of the National Park Service LWCF guidelines.

- *evaluation of the demand for and supply of outdoor recreation resources and facilities in the state;*
- *a program for implementation of the plan;*
- *certification by the Governor that ample opportunity for public participation has taken place in plan development; and*

The minimum requirements of the plan are:

1. *inclusion of a description of the process and methodology chosen by the state;*
2. *inclusion of ample opportunity for public participation in the planning process, involving all segments of the state’s population;*
3. *comprehensive coverage - it will be considered comprehensive if it:*

A. identifies outdoor recreation issues of statewide importance based upon, but not limited to, input from the public participation program. The plan must also identify those issues that the state will address through the LWCF, and those issues which may be addressed by other means;

¹ Retrieved from: - <http://www.nps.gov/ncrc/programs/lwcf/fed/index.html>

² Ibid

B. evaluates demand or public outdoor recreation preferences, but not necessarily through quantitative statewide surveys or analyses; and

C. evaluates the supply of outdoor recreation resources and facilities, but not necessarily through quantitative statewide inventories.

4. inclusion of an implementation program that identifies the state's strategies, priorities and actions for the obligation of its LWCF apportionment. The implementation program must be of sufficient detail to demonstrate that projects submitted to the NPS for LWCF funding implement the plan; and

5. inclusion of a wetlands priority component consistent with Section 303 of the Emergency Wetlands Resources Act of 1986. At a minimum the wetlands priority component must:

A. be consistent with the National Wetlands Priority Conservation Plan, prepared by the U.S. Fish and Wildlife Service;

B. provide evidence of consultation with the state agency responsible for fish and wildlife resources; and

C. contain a listing of those wetland types which should receive priority for acquisition.

SCORP may consist of a single document or be comprised of multiple documents, as long as the LWCF planning guidelines in chapter 630.1 are met.

State Requirements

Prior to 2001, Maine state law required BP&L to periodically report to the governor on the supply of and demand for outdoor recreation facilities and how these might be met (12 MRSA 1817). Submittal of the SCORP to the Governor accomplished this reporting requirement. In 2001, the Maine Legislature amended this law to require the BP&L director to submit a state comprehensive outdoor recreation plan to the joint standing committee of the Legislature having jurisdiction over state parks and public lands matters every 5 years. The amendment specifies that a plan meeting the federal SCORP requirements will also satisfy legislative requirements, further formalizing the role of SCORP in state government.

Planning Process

The planning process for the 2014-2019 Maine SCORP included robust public input helping to shape a vision for outdoor recreation needs and opportunities in Maine for the next five years. A major thrust of the public process involved a significant survey effort performed by the University of Maine resulting in detailed survey responses from over 16,000 Maine residents and visitors. Details on the planning process can be found in **Appendix A** and details for the survey methodology and findings can be found in **Appendix B**.

SCORP's Relationship with Other Recreation and Conservation Funds

The intended purpose of the SCORP goes beyond the LWCF program in that it serves as an assessment of outdoor recreation issues and recommends priorities for a broad range of programs and actions related to outdoor recreation opportunities in Maine. The following describes other programs that fund outdoor recreation projects, many of which assess potential projects in light of the SCORP. **Table 1** (at the end of this section) includes additional details associated with these programs.

Other Federal Grants and/or Programs of Note

Recreational Trails Program (RTP)

The Moving Ahead for Progress in the 21st Century Act (MAP-21) transfers a percentage of gasoline taxes paid on non-highway recreational use in off-highway vehicles from the Highway Trust Fund into the Recreational Trails Program for trail development, improvement and maintenance.

The Bureau of Parks and Lands has been designated as the state agency to administer the program in Maine. Within the Bureau, the Division of Grants and Community Recreation provides day-to-day supervision of RTP matters. The state uses these funds directly on trail projects on state lands and also provides funds received under this program as grants-in-aid to municipalities, other qualified sub-divisions of state government and to qualified non-profit organizations under guidelines established by the Bureau of Parks and Lands in conjunction with the Maine Trails Advisory Committee.

Forest Legacy Program

The USDA Forest Service Forest Legacy program protects “working forests” that protect water quality, provide habitat, forest products, opportunities for recreation and other public benefits. The Maine Forest Legacy Program focuses on acquiring conservation easements or fee interest in lands in order to protect the traditional uses and public values of Maine’s forests, and requires that projects funded with Forest Legacy funds allow public access to the lands. The Maine Forest Legacy Committee advises the Department of Conservation, Agriculture, and Forestry- Bureau of Parks and Lands on program policy and recommends projects to the State to be submitted for consideration in a competitive process for funding through the national Forest Legacy program.

State Grants and/or Programs of Note

Land for Maine’s Future Program (LMF)

In 1987, the Maine Legislature created the LMF Program to secure “the traditional Maine heritage of public access to Maine's land and water resources or continued quality and availability of natural resources important to the interests and continued heritage of Maine people.” Since then, multiple bonds supporting the LMF Program have passed by large margins.

LMF assistance has helped conserve over 560,000 acres of conservation and recreation lands through easement and fee acquisitions. Projects have conserved:

- 52 water access sites
- 37 farms totaling more than 8,900 acres
- 20 commercial working waterfront properties
- more than 1,200 miles of shore lands, and 158 miles of former railroad corridors for recreational trails.
- 315,000 acres of working lands reflecting LMF's efforts to conserve the working landscape and keep lands in private ownership with permanent land conservation agreements.

Maine Outdoor Heritage Fund

The Maine Outdoor Heritage Fund conserves wildlife and open spaces through the sale of instant Lottery tickets. With proceeds from ticket sales, grants are awarded twice a year. The seven-member Maine Outdoor Heritage Fund Board chooses projects in four categories that promote recreation as well as conservation of Maine's special places, endangered species and important fish and wildlife habitat.

Snowmobile Grants

The Maine Bureau of Parks & Lands provides *Municipal Grants* to municipalities or counties for sharing the cost of the construction and maintenance of snowmobile trails. *Snowmobile Club Grants* are made available to all snowmobile clubs who are on file with the Snowmobile Program (BPL) and wish to participate. It is intended to help defray some of the expenses incurred in snowmobile trail preparation, including pre-season work and winter grooming. This differs from the municipal grant in that it is made directly to a club and does not require municipal involvement. *Capital Grants* (for grooming equipment) are available to clubs or municipalities.

ATV Grants

The Maine Bureau of Parks & Lands provides Municipal Grants to municipalities or counties to help defer the cost of the construction or maintenance of ATV trails. ATV club grants are also available to ATV clubs who are on file with the ATV Program and are to help cover the costs of trail construction and maintenance and also include a special landowner appreciation bonus. There has been a 600% increase in grant funding since 2000. Additionally, the Maine Department of Inland Fisheries & Wildlife manages the ATV Enforcement Grant and Aid Program. Grants from this program are intended to maintain, improve, and expand ATV enforcement and training for state, county, and municipal enforcement officers. Grants are available for three different project types: General ATV Enforcement, Multi- Jurisdictional Enforcement, and Training & Equipment.

Boating Facilities Fund

The Boating Facilities Fund funds development and acquisition projects providing access to the waters of Maine for public recreational boating. The Boating Facilities Fund Grant Program, administered by the Bureau of Parks and Lands, assists towns, cities, districts and other public and private agencies in the acquisition, development, enhancement, or rehabilitation of boat launching facilities available to the general public. Sites

on both tidal and non-tidal waters are eligible. Funding is available to assist in the development of hand-carry as well as trailered boat launching facilities.

SCORP's Relation to Recreation and Conservation Efforts involving Private Philanthropy

It is hoped that the SCORP plan may help inform the outdoor recreation planning efforts undertaken by a broad spectrum of planners, advocates, and fundraisers. One way in which a SCORP document can expand its value and impact is by serving as support for organizations seeking private funds for recreation and conservation projects. Therefore, fundraisers and grant writers are strongly encouraged to use the 2014-2019 Maine SCORP as they seek support for outdoor recreation projects.

SCORP & the Federal Energy Regulation Commission's (FERC)

FERC licensing procedures require that recreation facilities and needs are evaluated as part of licensing process for hydroelectric facilities. Furthermore, 6 year recreation updates (Form 80) are also required. An approved SCORP is given consideration in the FERC licensing process, along with other State plans related to conservation and recreation.



Hiking at Donnell Pond Public Lands

Table 1: Select Programs/Funds Associated with Outdoor Recreation in Maine			
Program/Fund	Administered By	Types of Projects	Web URL(s)
<i>Land and Water Conservation Fund</i>	Maine Bureau of Parks and Lands	Statewide recreation planning, acquisitions with recreation values, outdoor recreation facilities	http://www.maine.gov/dacf/parks/grants/land_water_conservation_fund.html
<i>Recreational Trails Program</i>	Maine Bureau of Parks and Lands	Restoration, construction, acquisition, and education associated with recreational trails	http://www.maine.gov/dacf/parks/grants/recreational_trails_program.shtml
<i>Snowmobile/ATV Club and Municipal Grants</i>	Maine Bureau of Parks and Lands	Construction, maintenance, and capital expenses associated with snowmobile and ATV trails	http://www.maine.gov/dacf/parks/grants/snowmobile_grants/index.html http://www.maine.gov/dacf/parks/grants/atv_grants/index.html
<i>Boating Facilities Fund</i>	Maine Bureau of Parks and Lands	acquisition, development, enhancement, or rehabilitation of boat launching facilities	http://www.maine.gov/dacf/parks/grants/boating_facilities_fund.html
<i>ATV Enforcement Grant and Aid Program</i>	Maine Dept. of Inland Fisheries & Wildlife	maintain, improve, and expand ATV enforcement and training for state, county, and municipal enforcement officers	www.maine.gov/ifw/grants/atv.htm
<i>Forest Legacy Program</i>	Maine Bureau of Parks and Lands	working forests conservation for public benefits	http://www.maine.gov/dacf/parks/get_involved/advisory_councils/forest_legacy_committee.shtml
<i>Land for Maine's Future Program</i>	Maine Bureau of Resource Information and Land Use Planning	Protection (fee & easement purchase) of conservation, recreation, and farm land.	http://www.maine.gov/dacf/lmf/index.shtml
<i>Maine Outdoor Heritage Fund</i>	seven-member board	projects that promote recreation, conservation of Maine's special places, endangered species and important fish and wildlife habitat.	http://www.maine.gov/ifw/MOHF.html

Chapter 1: Overview of Major Issues and Outdoor Recreation Trends

The 2009-2014 Maine State Comprehensive Outdoor Recreation Plan emphasized and recommended strategies for connecting people to the outdoors in hopes of maintaining and enhancing health, wellness, conservation, local economies, and valuable heritage. This current Maine SCORP plan, updating and revising the prior Maine SCORP, still reflects this focus on connections – of outdoor recreation to health; and of outdoor recreation to Maine’s local, regional and statewide economy.

Though many of the issues and trends documented five years ago remain today, there are also new issues and new points of emphasis driving the direction of this 2014-2019 Maine SCORP. This chapter highlights issues of particular significance to the Implementation Strategies of this plan. Additional details on the issues described in this chapter can be found interspersed in other plan chapters and appendices.

The Nexus between Outdoor Recreation and the Larger Issues of Health and Economic Development

During the Plan development, input received from the plan steering committee, and new information received through the 2014-2015 public survey, led to an emphasis in this Plan that, simply stated, responds to the question ***“How can Maine maximize the use of outdoor recreation resources to positively affect Maine communities’ most pressing problems?”*** This question reflects insight from John L. Crompton of the Department of Recreation, Park and Tourism Sciences at Texas A&M University, who suggests that public funds be repositioned: “The ‘big idea’ associated with repositioning is that funds are invested in solutions to a community’s most pressing problems.”³ The message is to identify how outdoor recreation resources can be targeted at benefiting communities, including those individuals in the community who do not directly participate in outdoor recreation.

Economic Prosperity

- **Overall economic activity:** Economic activity associated with outdoor recreation in Maine is striking. The Outdoor Industry reports that outdoor recreation in Maine generates \$5.3 billion in consumer spending, 65,000 jobs, \$1.5 billion in wages and salaries, and \$382 million in state and local tax revenue.⁴ A study commissioned by the Maine Departments of Inland Fisheries and Wildlife and Office of Tourism documents that *“hunters spend \$231 million on hunting related activities. Collectively, recreational hunting supports more than 3,400 full- and part-time jobs providing more than \$115 million in income. The direct spending by sportsmen who hunt and the multiplier effects of that spending in Maine contribute \$191 million to the state’s gross state product and a total economic output of \$338.7 million.”*⁵ Economic impact studies for Maine State

³ Crompton, John L. (2008). Evolution and implications of a paradigm shift in the marketing of leisure services in the USA. *Leisure Studies Vol. 27 (No. 2)*, 181–206

⁴ Outdoor Industry Foundation, <http://outdoorindustry.org/advocacy/recreation/economy.html>, 2014.

⁵ Southwick Associates (2014). *Hunting in Maine in 2013: a Statewide and Regional Analysis of Participation and Economic Contributions*. Produced for the Maine Office of Tourism & Maine Department of Inland Fisheries and Wildlife

Parks⁶, ATV related activities in Maine⁷, and snowmobiling⁸ in Maine demonstrate (cumulatively) over \$440 million in economic activity – and that is from studies between ten and twenty years old.

Select Examples of Maine Communities as Retirement Destinations
<p><i>“A lot of Victorian architecture and is also on the river that has fishing and boating. There’s just a lot to do.”</i></p> <p><i>“A lot of state and national parks too.”</i></p> <p><i>“Acadia National Park is about 30 miles away. So that has a lot of hiking and biking opportunities.”</i></p> <p>Excerpted from a transcript of a Today Show interview in which AARP Magazine’s Gabrielle Redford lists Bangor, Maine as one the nation’s top five destinations for retirees.⁹</p> <p><i>“She and her husband like that they can walk to the downtown, that performance centers and museums are nearby, and that people are active around the area — be it walking, biking, kayaking, boating, hiking, or volunteering their time for community groups.”</i></p> <p>Reference from Associated Press article on why Camden, Maine has become a retirement destination.¹⁰</p>

- Enhancing tourism: in 2013, tourism in Maine contributed over \$5.2 billion in direct expenditures and supported 88,585 jobs¹¹. One of the core strengths supporting Maine tourism is the state’s iconic natural attractions, parks, conservation areas, and outdoor recreation activities. The Maine Office of Tourism’s Strategic Plan lists “Continue to keep natural/outdoor assets at the core of MOT’s promotional messaging”.¹² Sustaining and enhancing outdoor recreation to serve the tourism industry is a strategy towards achieving economic prosperity.
- Attracting businesses: Leisure and recreation are key components of quality of life, which is a factor in attracting/retaining workers and therefore is a factor in where many businesses choose to locate. Outdoor recreation can influence business attraction.
- Attracting retirees: Evolving notions of where to retire make Maine’s pristine environment

and small-town character appealing to a growing number of Baby Boomer generation retirees. Outdoor recreation plays a role in making our communities attractive places to retire.

⁶ Morris, Charles E., Robert Roper, and Thomas Allen. 2006. *The Economic Contributions of Maine State Parks: A Survey of Visitor Characteristics, Perceptions and Spending*. University of Maine, Margaret Chase Smith Policy Center.

⁷ Morris, Charles E. et al. 2005. *Economic Contributions of ATV-Related Activity in Maine*. University of Maine, Margaret Chase Smith Policy Center

⁸ Reiling, Stephen, Matthew Kotchen, and Alan Kezis. 1997. *An Economic Evaluation of Snowmobiling in Maine*. University of Maine Department of Resource Economics and Policy for the Maine Snowmobile Association.

⁹ Today Show (Producer). (2013, October 8). *AARP’s 5 Best Places to Retire*. [Video Transcript]. Retrieved from: <http://www.today.com/video/today/53216904#53216904>

¹⁰ Canfield, Clarke. (2012, September 18). Some boomers looking north for retirement destination. Boston Globe. Retrieved from: <http://www.bostonglobe.com/business/markets/2012/09/17/retirees-head-unconventional-destinations/9FD51nuaviAxBSn7sDEQ5H/story.html>

¹¹ Maine Office of Tourism, *Five Year-Strategic Plan*, 2013.

¹² Ibid

Health and Wellness

- Community health and wellness is a paramount concern with significant implications for individual quality of life, public health expenditures, and a multitude of other aspects of life in Maine. Outdoor recreation plays a significant, positive role in addressing health and wellness and can do even more with focused efforts. Physical and mental health benefits found to be associated with parks and green spaces are listed in **Table 2**.

Ensuring availability of and access to outdoor recreation spaces is a health issue. As stated in the 2009 Resources for the Future discussion paper, “creating and improving recreational spaces can spark a 25 percent increase in those who exercise at least three times per week”.¹³ Given that Maine has the highest obesity rates in New England, ensuring access to outdoor recreation is an essential public health tool. Outdoor spaces for recreation are a key social infrastructure with real community value. This concept is reinforced by research findings reported by the Robert Wood Johnson Foundation which state that proximity to parks is linked to increased participation and physical activity. Trails, playgrounds, and sports facilities along with supervised programs and renovations are shown to increase vigorous physical activity in youth.¹⁴

Table 2: Physical and Mental Health Benefits Associated with Parks and Green Space (Source: <i>Park Science</i> ¹⁵)	
Physical	Mental
Reductions in cardiovascular disease and diabetes	Improvements in cognitive functioning
Reduced obesity	Improved mood and self-esteem
Reduced heart rate, muscle tension, blood pressure	Reduced depression, anxiety, and stress
Positive influences on immunity and cardiovascular function	Increased attention levels

- Community pride and civic engagement are core elements of thriving communities. Outdoor recreation, conservation, and historic preservation are not only foundational aspects of parks, they are also sources of local pride and both a means and reason around which to engage in volunteerism. Parks, conserved landscapes, outdoor sporting facilities, greenways and water access, and historic sites are major threads woven into the fabric of vibrant Maine communities. These very elements are most typically at the core of community revitalization.
- Youth engagement and development is positively influenced by outdoor recreation programs, and any positive influence on youth bears beneficial fruits for communities. The National Recreation and Parks

¹³ Godfrey, Geoffrey. (2009). Outdoor Recreation, Health, and Wellness Understanding and Enhancing the Relationship. Prepared for the Outdoor Resources Review Group Resources for the Future Background Study. Washington, DC.

¹⁴ Active Living Research (2010). *Parks, Playgrounds and Active Living. Research Synthesis*. Retrieved from activelivingresearch.org.

¹⁵ Thomsen Jennifer M., Robert B. Powell, and Diana Allen (2003). Designing Parks for Human Health and Development. Park Health Resources: Benefits, Values, and Implications. *Park Science*. Volume 30 (2).

Association reports evidence for nine outcomes that are particularly important results of participation in out-of-school time (OST) programs. These outcomes occur for participants, families, and the wider community.

Out of School Time Recreation Programs are shown to

1. contribute to reducing juvenile delinquency
2. contribute to increasing positive and reducing negative behaviors
3. expose youth to less violence
4. improve children's educational performance and thus impact the quality of the future work force and the national economy
5. help decrease health care costs related to childhood obesity
6. increase the economic contributions of young people to society when they become adults
7. help youth develop self-confidence, optimism, and initiative"¹⁶

Outdoor Recreation Issues of Statewide Importance

Plan research and discussions have identified a number of **key issues** relating to outdoor recreation in Maine and its capacity to benefit communities across the state. These include:

- Maine continues have **health and wellness needs** that outdoor recreation can help address. **Obesity** and the related issue of inactivity are major, costly issues in Maine communities and the availability of diverse, available recreation opportunities directly combats these intertwined issues.
- As evidenced by robust survey work in this SCORP planning process, **"close to home" outdoor recreation** opportunities are highly sought and valued. Proximity to outdoor recreation is a huge factor in the level of activity of our residents as well as health and community desirability measures.
- Maine's has the **oldest population in the nation**, based on median age. This characteristic needs to be considered as specific types of recreation projects are planned and developed.
- Maine is also the state with the **highest percentage of people living in rural areas**. On the one hand this small-town characteristic is to be celebrated, while on the other, it brings with it challenges in resource maintenance and efficient recreation program delivery. Furthermore, Maine's rural communities are losing population, while relatively more urban southern Maine communities are seeing at least modest growth. Small, rural Maine communities are looking to outdoor recreation as one tool to stem population loss and lure in-migration of business and residential interests.
- There is continued to concern over **declining participation of youth** in outdoor recreation. Being active outdoors has traditionally been part of life in Maine. Efforts to engage youth and families in the outdoors are seen as having numerous health, social, and conservation benefits.
- **Maintenance, sustainability, and adaptability to change** over time are all recognized as issues for current as well as potential outdoor recreation facilities.
-

¹⁶ Witt, Peter A. and Linda L. Caldwell. (2010). The Rationale for Recreation Services for Youth: An Evidenced Based Approach. Prepared for the National Recreation and Parks Association. Retrieved from <http://www.nrpa.org/Publications-and-Research/Research/Industry-Monographs/>

- **Effective public communication** continues to be a major issue for outdoor recreation. This includes the need to provide better information about available recreation opportunities, better marketing and messaging to assuage anxiety and inspire activity, and the need to adapt to modern communication technology and trends.
- **Private lands being open to public** recreational use also continues to be a vital issue. Mainers and tourists alike still rely heavily on private lands for recreation. Posting of land and its associated loss of recreation opportunity is a continued threat. Landowner relations and improved user behaviors on private lands are integral components of this issue.
- **Collaboration and coordination** between various interests are seen as essential to successful projects and resource management. Interestingly, this view is reflected in the SCORP plans of other rural states; analysis of other rural states' SCORP priorities and issues shows collaboration as a leading strategy.

Major outdoor recreation trends guiding the Implementation Strategies of this Plan:

- There is evidence of a growing trend in which people are seeking out more **events** at public recreation areas. Examples of growing demand include adventure races, 5k & 10k trail races, mountain biking events, birding festivals and other thematic special events, etc.
- **Trails** continue to be very popular recreation amenities, both motorized and non-motorized. In particular, non-motorized trails are used very frequently by Maine residents.
- **ATV** trail development has seen notable expansion within the last 5-10 years and the number of non-resident ATV registrations has climbed significantly.
- **Mountain biking** in particular has seen an increase in demand, as evidenced by the strong growth in Maine chapters of the New England Mountain Bike Association and the associated trail development these groups have spearheaded.
- Survey work shows highest interest in **motorized trail projects linking/serving communities** as well as **easy non-motorized trails in natural settings**.
- **Viewing and learning opportunities** including but not limited to self-guided interpretive trails, hands-on programs, visiting nature and historic centers, and other such informal learning opportunities are growing in demand nationally and are in demand here in Maine.
- **Time** and to a somewhat lesser degree **cost** are shown as the most significant barriers to outdoor recreation in Maine. It is fair to postulate that the time crunch of modern life, including the reduction in the traditional vacation, is one of the factors making close to home outdoor recreation in high demand.
- **Water-based recreation** continues to be a strong growth area of outdoor recreation demand. This is particularly true of kayaking and stand up paddle board use.
- **Amenities** such as showers, flush toilets, RV sites with water and electric, and an expanded range of camping opportunities (e.g., yurts and cabins) were identified as desirable Maine State Park features and/or additions and are presumably similarly appreciated/ desired at other non-state facilities.
- **Attendance** figures across various Maine outdoor recreation destinations shows that attendance is not in lock-step across the state. Most generally, more distant "north woods" destinations that tend to be more remote and primitive have not seen as solid attendance figures as other sites such as Maine

State Parks and Acadia National Park. Baxter State Park is a primitive outdoor recreation destination in the northern forest that has held its own much better, however.

- Maine residents and visitors alike use a variety of **public and private lands** to meet their recreation needs. Land trusts, state parks and public reserved lands, municipal lands, federal lands, and private lands with public recreational access all serve substantial percentages of the public based on reported visitation. Outdoor recreation in Maine continues to rely on a mosaic of landowner types.



Camden Hills State Park

Chapter 2. Demand for Outdoor Recreation Activities in Maine

The public's demand for specific outdoor recreation activities evolves over time. Primary finding #1 of the US Forest Service's 2010 Resource Planning Act Outdoor Recreation Demand Assessment¹⁷ states, "Outdoor recreation choices by people today are noticeably different from those made by and available to previous generations of Americans." This broad statement holds true in Maine and is valuable to keep in mind when considering the demand for outdoor recreation facilities and experiences in the Pine Tree State.

This section of the 2014-2019 Maine State Comprehensive Outdoor Recreation Plan strives to not only discuss static demand but to also consider trends in the demand for specific types of outdoor recreation in Maine.

Tools used to evaluate outdoor recreation demand include:

- Demographic data and insights primarily obtained through the US Census
- Trends in the purchase of various outdoor activity related licenses and registrations over time
- National visitor-use data trends (National Park Service, America's State Parks)
- Visitor-use data from Maine recreation providers such as Maine State Parks, North Maine Woods, Acadia National Park, and the Maine Island Trail
- Quantitative and qualitative data obtained through an outdoor recreation survey conducted specifically for the 2014-2019 ME SCORP
- National reports on outdoor recreation participation
- National Survey on Recreation and the Environment (NSRE) data

In addition to serving the recreation needs of its residents, Maine is an outdoor recreation destination for the greater New England/Northeast region. Therefore, understanding recreation trends across the northeast informs our understanding of outdoor recreation demand in Maine. Given that campground reservations in Maine State Parks average nearly 40% non-resident campers and that other entities such as Baxter State Park (46% non-resident visitation in 2013) experience high levels of nonresident visitation, it is important that recreation planning reflect the full range of visitors, both resident and non-resident.



Moose River

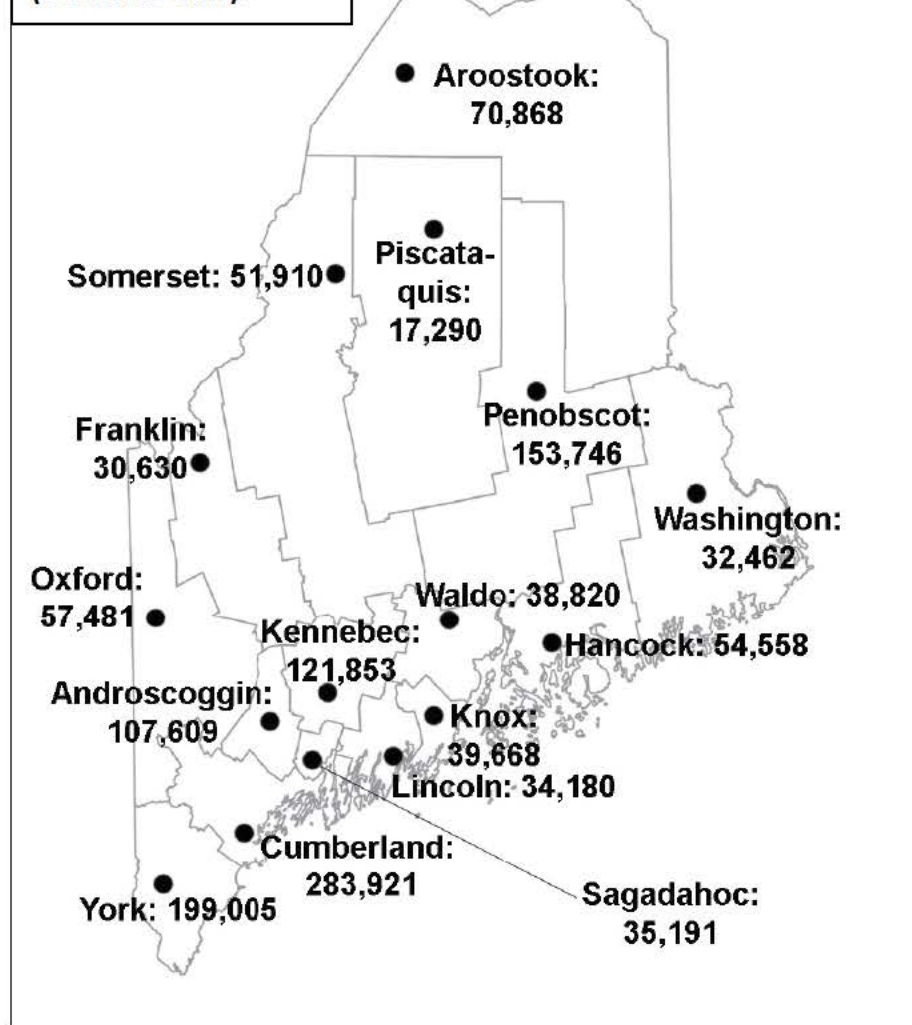
¹⁷ U.S. Department of Agriculture, Forest Service. 2012. Future of America's Forest and Rangelands: Forest Service 2010 Resources Planning Act Assessment. Gen. Tech. Rep. WO-87. Washington, DC. 198 p.

Maine: Its People and Visitors

Just as the character of Maine's landscapes varies from region to region, measures such as population and other demographics vary greatly between regions. Maine's population can be parsed many ways, but most simply it can be said that Maine's population patterns place the majority of residents in the southern/coastal portion of the state. While Maine does have several population centers defined as "urban areas", it is distinctively a state of small, rural towns. This and other aspects of demographics are shared here ahead of discussions on outdoor recreation supply to acknowledge that the distribution of people and recreation

resources have important bearings on one another.

Figure 1: 2010 Maine Population by County (US Census Data).



In regard to total population, southern Maine holds the majority of Maine's estimated 2010 population of 1,328,361. The two southernmost counties, York and Cumberland, cumulatively comprise only 7% of Maine's geographic area but retain roughly 36% of the population. In contrast, the state's northernmost county, Aroostook County, is approximately 1,000 square miles larger in size than the state of Connecticut and has a population of just over 70,000. As such, it has roughly 19% of Maine's land area and only 5.3% of the population.

While the majority of Maine residents live in the southern portion of the state, that does not equate to the majority of Maine residents living in urban areas. In fact, Maine has the nation's highest percentage of residents living in rural areas.

The 2010 US census data lists 61.3% of Maine residents living in rural areas. Maine's communities are predominantly small towns with only 11 municipalities in excess of 10,000 residents and only one, Portland, in excess of 50,000.

Population trends for Maine point to a decline in the majority of counties. Only Androscoggin, Cumberland, Knox, and York are expected to show immediate growth (with Penobscot expected to show eventual growth).¹⁸ Overall, Maine's population is expected to decline beginning in 2020. **Table 3** shows past population change by county.

2010 Decennial Census	Count 2010	Δ from 2000	% Δ 2000	% Δ 1990
Cumberland	281,674	16,062	6.0%	15.9%
York	197,131	10,389	5.6%	19.8%
Penobscot	153,923	9,004	6.2%	5.0%
Kennebec	122,151	5,037	4.3%	5.4%
Androscoggin	107,702	3,909	3.8%	2.3%
Aroostook	71,870	-2,068	-2.8%	-17.3%
Oxford	57,833	3,078	5.6%	9.9%
Hancock	54,418	2,627	5.1%	15.9%
Somerset	52,228	1,340	2.6%	4.9%
Knox	39,736	118	0.3%	9.4%
Waldo	38,786	2,506	6.9%	17.5%
Sagadahoc	35,293	79	0.2%	5.2%
Lincoln	34,457	841	2.5%	13.5%
Washington	32,856	-1,085	-3.2%	-6.9%
Franklin	30,768	1,301	4.4%	6.1%
Piscataquis	17,535	300	1.7%	-6.0%

Demographic Characteristics: Maine's current and projected population trends are only one part of the story of those who call Maine home. The *population composition and characteristics, or demographics*, provide important details relevant to outdoor recreation planning (**Table 4**). The table reveals some important population characteristics that have a direct bearing on recreation issues:

- *Maine's population is the **oldest in the nation** measured in terms of median age (42.7).* The state's population of young people is at or near the bottom of the country, depending on the specific age bracket. Maine is tied with Vermont for smallest percentage of its population coming from those aged 0-18. As mentioned above, it is a very rural place, with overall low population density.
- Proportionally, Maine has a high rate of **veterans**.
- Maine is slightly below average regarding the percentage of people living below the **poverty level**.
- Maine is also a state with **limited diversity**, having the nation's highest rate of "white alone" ethnicity (94.4%).

¹⁸ Governor's Office of Policy and Management. (2013). *Maine Population Outlook to 2030*. Augusta, ME. Retrieved from: <http://www.maine.gov/economist/projections/pub/Population%20Outlook%20to%202030.pdf>

- In **education** attainment, the State is among the national leaders in high school diploma attainment but slightly below average in percentage of people attaining a bachelor's degree or higher.
- Maine's percentage of residents with a **disability** is higher than the national average. According to US Census figures (American Community Survey), 7.8% of Maine's 2013 population over the age of 5 has an ambulatory disability. The proportion of people 65 and older with disabilities is significantly higher than other age groups. Approximately 20% of Maine residents 65 years and over have an ambulatory disability. This higher proportion of people with disabilities among the older population will become increasingly important as the number and relative proportion of older people in Maine continues to increase.

Table 4: Maine – Its People Compared to National Figures

	Maine	United States
Population, 2013 estimate	1,328,302	316,128,839
Persons under 18 years, percent, 2010	20.7%*	24%
Persons 18-44 years, percent, 2010	32.5%**	36.5%
Persons 65 years and over, percent, 2010	17.3%†	13%
Median age	42.7††	37.2
White alone, not Hispanic or Latino, percent, 2010	94.3%††	62.6%
Foreign born persons, percent, 2008-2012	3.3%	12.9%
Language other than English spoken at home, percentage age 5+, 2008-2012	7.0%	20.5%
High school graduate or higher, percent of persons age 25+, 2008-2012	90.6%	85.7%
Bachelor's degree or higher, percent of persons age 25+, 2008-2012	27.3%	28.5%
Veterans as a percentage of the population, 2008-2012	9.84%	6.91%
Persons below poverty level, percent, 2008-2012	13.3%	14.9%
Percent of population with a disability, 2008-2012 American Community Survey	15.6%	12
Persons per square mile, 2010	43.1	87.4
Percent of population living in rural areas	61.3%††	19.7%
<i>*Only the District of Columbia had a lower percentage.</i>		
<i>**Lowest or tied for lowest percentage or number in the nation</i>		
<i>† Only Florida had a higher percentage.</i>		
<i>†† Highest in the nation</i>		

Why Do Demographics Matter?

More and more, people are looking for close-to-home outdoor recreation opportunities. Therefore, where people live and what population trends are occurring in specific places has direct bearing on the demand for outdoor recreation infrastructure and support. However, there is more to the story. As shown by the 2014-2019 ME SCORP survey, characteristics such as age, education, and income are correlated with relative likelihood to participate in specific types outdoor recreation activities. Examples from the survey (**Appendix B**) are excerpted below:

- “**Age** was found to have a significant influence on participants’ responses in a number of significant ways. Younger respondents (18-34 years old) were more likely to favor and visit a wider variety of settings and recreation sites, prefer more primitive settings, participate in a wider array of outdoor activities, and participate more frequently than older participants (69-102).”
- “Lower **income** respondents were more likely to report that they were constrained from participating in activities due to financial cost and were most likely to believe that the entrance fees to Maine State Parks were too expensive. The low income group expressed higher levels of interest in instructional programs and night sky events being offered or potentially offered at Maine State Parks.”
- “Participants with relatively low levels of **education** (less than high school or high school diploma/GED) were more likely to participate in driving for pleasure, fishing, hunting, motor boating, riding an ATV and snowmobiling. The low education group was overall highly interested in trail activities but were least interested in non-motorized trails.”
- “Highly educated respondents (master’s degree, doctoral degree, or professional degree) were . . . more likely to find a wider variety of outdoor settings very desirable than the other groups including backcountry trails, beaches, coastal trails, and community trails. The highly educated group was also most likely to participate in a wider variety of outdoor activities than other groups. They also were the most likely group to use the widest assortment of travel resources including the internet, magazine articles, the Maine Bureau of Parks and Lands website, Maine guidebooks, newspaper articles, and talking with staff who work at public recreation areas.”

As organizations and communities think about the characteristics of their communities and visitors (including marketing and communication with target visitors), they can take advantage of easily obtained demographic data available through outlets such as the US Census to better tailor projects to the audience. Demographics can help planners better understand the culture and characteristics of various regions and better tailor projects that will meet the needs and desires of Maine residents and guests. Data should not take the place of communication and listening during planning, but there are readily accessible tools to incorporate more data and research into recreation planning.

Demand for Outdoor Recreation Activities – National Overview

Before focusing on Maine, let's look at the **national** picture. Between 2000 and 2009, the number of people who participated in nature-based outdoor recreation grew by 7.1 percent and the number of activity days grew about 40 percent.¹⁹ The Outdoor Foundation reported that “in 2013, a record number of Americans — 142.6 million — participated in at least one outdoor activity” and collectively, went on 12.1 billion outdoor outings²⁰. While there are specific activities in which participation is losing ground, overall outdoor recreation demand as measured by participation is growing. In large part, this is due to population growth.

The most popular and most frequent activities (national) from the Outdoor Foundation are listed in **Table 5**. The Outdoor Foundation also reports on specific activities with the notable growth or decline. **Table 6** displays activities exhibiting the most growth in the past 3 years.

Table 5: Most Popular and Most Frequent Outdoor Recreation Activities in the US (2013) as Reported by the Outdoor Foundation.			
Top 5 Most Popular Activities	US Participants	Top 5 Most Frequently Participated in Activities	Total Outings
Running/Jogging	33.8 Million	Running/Jogging	2.8 Billion
Fishing	31.0 Million	Bicycling	1.4 Billion
Bicycling	27.4 Million	Birdwatching	422.3 Million
Hiking	23.8 Million	Wildlife Viewing	413.4 Million
Camping	22.1 Million	Hunting	230.3 Million
Note: Most popular activities as reported by the National Survey on Recreation and the Environment ²¹ using data from 1999-2008 list the top 5 activities in order as: 1) walking for pleasure, 2) family gatherings, 3) gardening or landscaping for pleasure, 4) viewing or photographing natural scenery, 5) visiting nature centers. It should be noted that NSRE and Outdoor Foundation surveys track similar but not identical activities. The Outdoor Foundation has a more pronounced focus on human powered activities.			

America's state parks saw a total of 727 million in attendance in 2013 – down 1.89% from 2012 but up nearly 10% from 1984. Attendance is forecast to rise to 759 million in 2016.²² **National Park** recreation visits in 2014 totaled 292.8 million. This represents a 4.4% increase from the 2009-2013 five-year average.

¹⁹ Cordell, H. Ken. (2012) USDA Forest Service: Southern Research Station. *Outdoor Recreation Trends and Futures: A Technical Document Supporting the Forest Service 2010 RPA Assessment*. Asheville, NC.

²⁰ Outdoor Foundation (2014). *Outdoor Recreation Topline Report 2014*. Retrieved from: <http://www.outdoorfoundation.org/research.participation.html>

²¹ Maine and the Maine Market Region Report. (2009). Produced by the US Forest Service for the 2009-2014 Maine State Comprehensive Outdoor Recreation Plan. Maine Department of Conservation. Augusta, ME.

²² Smith, Jordan W. and Yu-Fai Leung (2014). 2014 Outlook and Analysis Letter: a Report Prepared for the National Association of State Park Directors. NC State University.

The 2011 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation reports the following regarding wildlife-related recreational activity:

“The 2011 Survey revealed that over 90 million U.S. residents 16 years old and older participated in wildlife related recreation. During that year, 33.1 million people fished, 13.7 million hunted, and 71.8 million participated in at least one type of wildlife-watching activity including observing, feeding, or photographing fish and other wildlife in the United States.”²³

The survey also reports that from 2006 to 2011, wildlife recreation activities in the United States rose 3 percent. The increase was attributed primarily to those who fished and hunted²⁴.

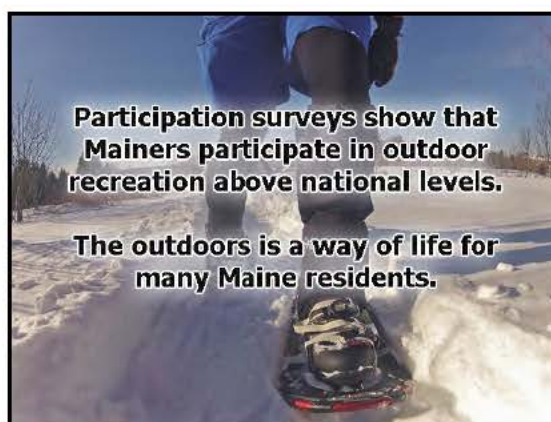
Table 6: Fastest Growing Outdoor Recreation Activities in the US (2013) – as Reported by the Outdoor Foundation.*

Top 5 Fastest Growing Activities	Percent Change (Participation)
Adventure Racing	+28%
Off-Road Triathlon	+25%
Stand Up Paddling	+24%
Kayak Fishing	+20
Kayaking	+11

*The Outdoor Foundation has a more pronounced focus on human powered activities.

Outdoor recreation participation in Maine may follow some of the general trends and patterns seen in the wider United States, but it is unique in many ways. In addition to showing that Maine residents participated in outdoor recreation activities at higher rates than both national and regional averages, the 2009-2014 Maine SCORP report listed a number of National Survey on Recreation and the Environment activities in which Maine residents participated a minimum of 10 percentage points higher than both regional and national levels. These included:

- Primitive camping
- Big-game hunting
- Snow/ice activities (any type)
- Snowmobiling
- Boating and canoeing
- Coldwater fishing
- Viewing/photographing other wildlife besides birds
- Gathering mushrooms, berries, etc.



²³ U.S. Department of the Interior, U.S. Fish and Wildlife Service, and U.S. Department of Commerce, U.S. Census Bureau. 2011 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation.

²⁴ Ibid

Maine Resident Outdoor Recreation Patterns: License Sales, Registrations, and Attendance Figures

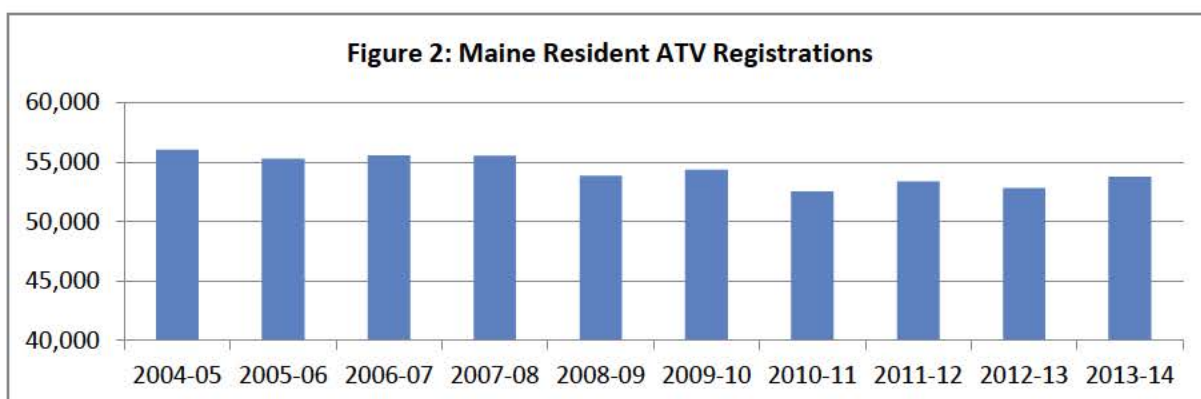
Data provided by the Maine Department of Inland Fisheries and Wildlife shows 178,735 resident fishing licenses sold and another 145,562 resident hunting licenses sold in 2013. When the 2009-2013 period is compared to the 2004-2008 period, annual fishing licenses sold decreased 1.1% and annual hunting licenses decreased 7.9%.



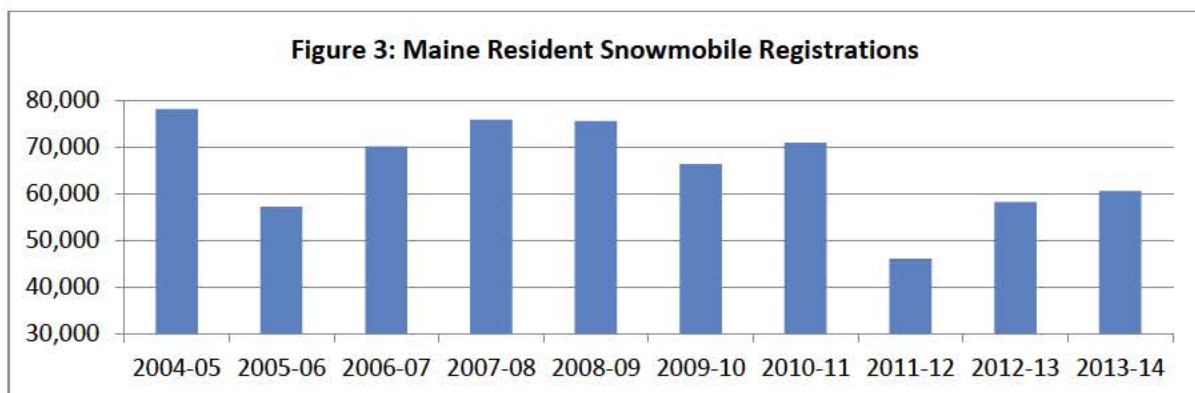
It is noteworthy that license sales growth for lifetime licenses first instituted in 2000 has steadily grown. Lifetime hunting, fishing, or combination lifetime licenses are available for purchase for citizens under 16 and over 64.

It bears mentioning that in the survey work conducted by the University of Maine for this SCORP report, 40.7% of the general population sample reported fishing within the last two years (n=204) and 25.4% reported hunting activity (N=204). A larger sample group of recreationists (made up of combined ME IFW and Bureau of Parks and Lands email addresses) showed limited county variation for reported fishing participation but notable regional variation for hunting activity. Residents of the southern coastal counties were less likely to have hunted within the last two years than residents of the other counties. Additionally, there was evidence of higher levels of hunting participation among the 69 years old and above age class. More information on the survey can be found in **Appendix B**.

As shown in **Figure 2**, All-Terrain-Vehicle (ATV) resident registrations over the past ten years have hovered between 52,000 and 56,000. However, it should be noted that there has been strong and steady growth in the number of non-resident seasonal ATV registrations, which totaled nearly 9,000 in 2013-14. It is also worth noting that ATV riders shifting from smaller one up machines to larger side by sides machines may be cutting the number of ATVs being registered in that couples, families, etc. are more likely to now be sharing an ATV that seats multiple riders.

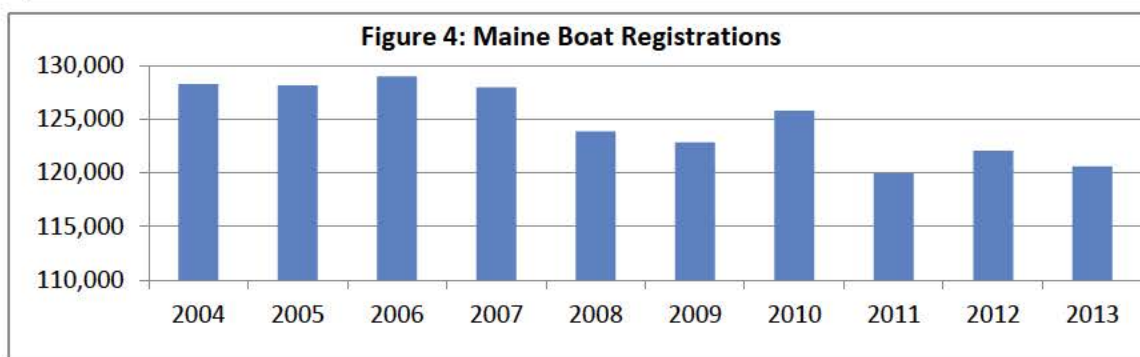


Snowmobile registrations during the past ten years have shown notable fluctuation, with dramatic reductions in registrations during low snow years and challenging economy of 2011/2012. The 2014-2019 ME SCORP survey data shows that snowmobile use is greater by residents in the typically high snow areas of the mountain/northern/eastern counties as compared with residents in the typically low snow areas of the southern coastal and mid-coast regions.



Snowmobiling on the Downeast Sunrise Trail

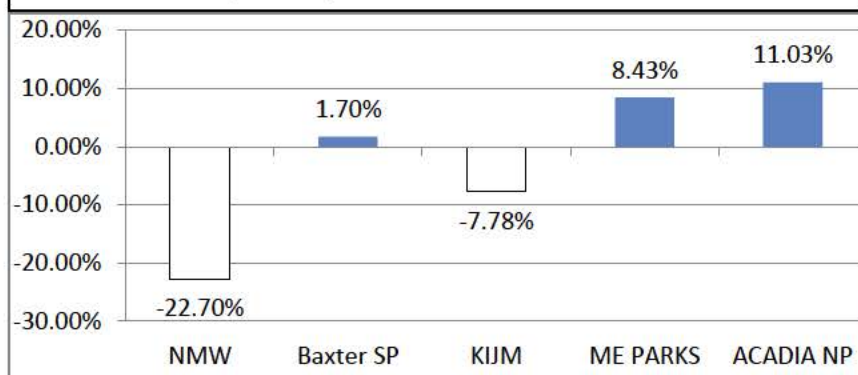
Maine boat registrations, reported in Figure 4 do not have a non-resident component and are not required unless a motor is attached (e.g., motor-less canoes, kayaks). As with ATVs and (not as dramatic as) snowmobile registrations, there is a modest dip in registrations within the last several years



Park and conservation areas attendance data in Maine is available from a variety of sources (Figure 5). While these figures are useful in generally showing trends in overall recreational use of outdoor resources, it is noted that they do not reflect use of state Public Reserved Lands, municipal parks and conserved lands, land trust properties, and the majority of private landowners who allow public recreation.

Maine State Parks also show total attendance growth over the last five years. State Parks have increased

Figure 5: Percent Change in Visitation between the 2004-2008 Average and 2009-2013 Average. NMW = North Maine Woods, KIJM = KI Jo Mary Forest, ME Parks = Maine State Parks.

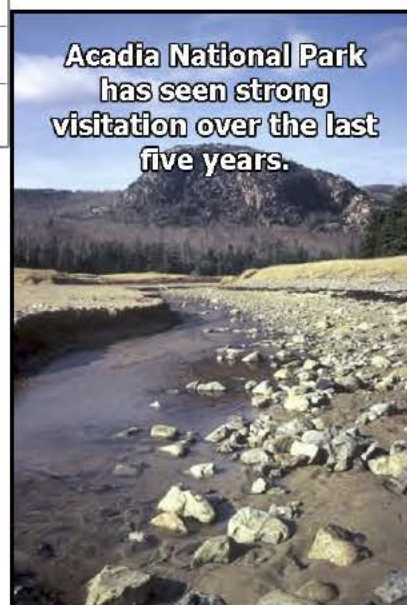


average attendance 8.4% when 2009-2013 is compared to 2004-2008. While the five-year camping average fell 8.3%, day use has been strong in recent years.

Acadia National Park, located in

eastern coastal Maine, shows growth in its visitation and in camping. Its average number of visitors for the period of 2009- 2013 (2,358,505) is up 11% from the previous five-year period. Camping comparisons for the same periods show a 21% increase in camping visits at Acadia.

Baxter State Park, an independently (from Maine State Parks) operated wilderness park of over 200,000 acres maintains detailed public use figures. Using the same five-year analysis mentioned above, Baxter State Park shows an increase of 1.7% for total visitor days with 117,481 visits in 2013. Camping activity at Baxter SP is up 10.2%.





Not all outdoor recreation destinations in Maine have seen increases in visitation. **North Maine Woods** (3.5 million acres) and the **KI-Jo Mary Multiple Use Forest** (175,000 acres) display the most dramatic losses in visitation. These gated areas of (predominantly) private timberland are open to many types of public, forest-based recreation (fees apply). Using the aforementioned five-year analysis, North Maine Woods has seen a 22.7% drop in visitation. The KI-Jo Mary property has seen a 7.7% drop. In 2013, the North Maine Woods saw 176,867 visitor days while the KI-Jo Mary Forest saw 19,423

visitor days.

Camping data for the **Allagash Wilderness Waterway**, a state-administered scenic river in the Federal Wild & Scenic River System, shows a five-year average drop of 10.5% from the 2004-2008 average.

Location, Location, Location: Indications of where people recreate in Maine are not limited to attendance figures. The survey effort undertaken for this report produced data related to where respondents reported having visited for recreation within the last two years. The data for Maine residents are presented below (**Table 7**). While public outdoor recreation destinations such as Acadia National Park and Maine State Parks are notable in this reporting, both **land trust properties** and access to **private land** were important destinations. Additionally, non-resident recreationists present some interesting data in that over half of them report having visited a Maine State Park and over half report having used private land for recreation (see **Figure 7**, pg. 26).

Table 7: Visitation to Major Outdoor Recreation/Conservation Sites over the Past Two Years by the Two Maine Resident Survey Segments

LOCATION	Maine General Pop. (%)	Maine Resident/ Recreationists
Local Municipal Parks	78.9	75.0
Acadia National Park	61.7	58.8
Baxter State Park	29.9	38.9
Farms/Agricultural Sites	48.5	49.6
Maine Public Res. Lands	29.4	46.5
Maine State Parks	77.0	78.8
Priv. Land with Rec. Access	53.4	69.8
Land Trust Properties	52.0	50.7
U.S. Fish & Wildlife Ref.	33.8	42.1
White Mt. National Forest	41.7	39.5

In addition to providing insight into the “designated” types of outdoor recreation destinations chosen by the resident and visiting public, the 2014 ME SCORP survey gives a glimpse into the settings preferred by respondents. **Figure 6** on page 25 shows eight of the top scored settings, with percentages listed reflecting the averaged percentage of respondents across the three samples who rated the given setting as “very desirable” on a five-part scale ranging downward to “very undesirable”. One take-away from

responses is that not only are Maine’s storied coastal settings very desirable to the public, so too are more inland resources. In fact, “rivers”, “lakes/ponds”, “mountains”, and “forests” all were rated higher than “coastal trails” and “beaches”.

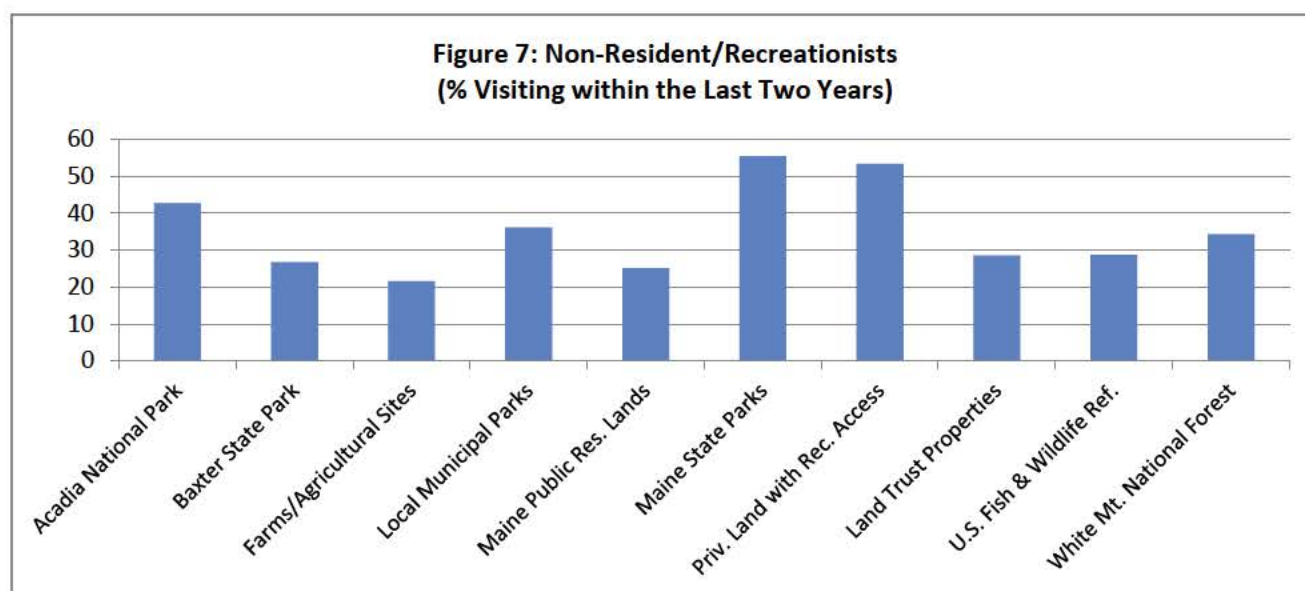
Figure 6: Percentage of 2014 ME SCORP Survey Respondents Who Rated the Given Setting as “Very Desirable” on a Five-Part Scale Ranging from “Very Desirable” to “Very Undesirable.” Top Eight Settings:



Maine's Non-Resident Recreating Public

In 2013, tourism in Maine contributed over \$5.2 billion in direct expenditures. This activity supported 88,585 jobs²⁵. Maine's natural resources and recreation opportunities are central to Maine's tourism industry.

When asked in the 2014 ME SCORP survey **where in Maine they recreated** in the past two years, non-residents indicated that they visited a diversity of site types. **Figure 7** shows the results. Of particular note is that over 50% visited a Maine State Park, over 50% reported having visited private land for recreation purposes, and even municipal parks were visited by over 30% of respondents. So, while there is a popular image of tourists following US Rt. 1 along the coast to Acadia National Park, the more truthful picture is that tourists are coming to enjoy Maine's outdoor recreation opportunities alongside Mainers in all corners of the state. Everything from town square pocket parks to vast backcountry areas serve as a foundation for the tourism industry. That being said, it is important to note that the 2014 ME SCORP survey non-resident data is from a pool that obtained a hunting or fishing license, reserved a Maine State Park campsite, registered a snowmobile or ATV, or registered a boat in Maine.



Tourism/Recreation Findings: The Maine Office of Tourism contracts for visitor research. In addition to supporting the tourism industry, aspects of this information is useful for understanding tourist-related demand for outdoor recreation in Maine. This research, conducted by Digital Research Inc., reinforces that outdoor recreation is a key tourism driver in Maine. When asked why they chose to visit Maine, tourists rated “beautiful scenery” as the top reason. Other outdoor recreation related responses in the top ten responses include “enjoy the coastline” (2nd) and “outdoor recreation options” (8th)²⁶. The same report identifies “to

²⁵ Maine Office of Tourism (2014). *Five-Year Strategic Plan*. Augusta, ME.

²⁶ Maine Office of Tourism (2014). *Maine Office of Tourism Visitor Tracking Research 2013 Calendar Year Annual Report*. Prepared by Digital Research Inc. Retrieved from: <http://www.visitmaine.com/research>

enjoy nature” (36%) and “outdoor recreation/adventure” (33%) as *the primary purpose* for overnight leisure trips²⁷. Water related activities such as kayaking and outdoor swimming were rated very highly by visitors. Data sources for the Maine Office of Tourism –commissioned research were not limited to non-residents who obtained a fishing license etc.

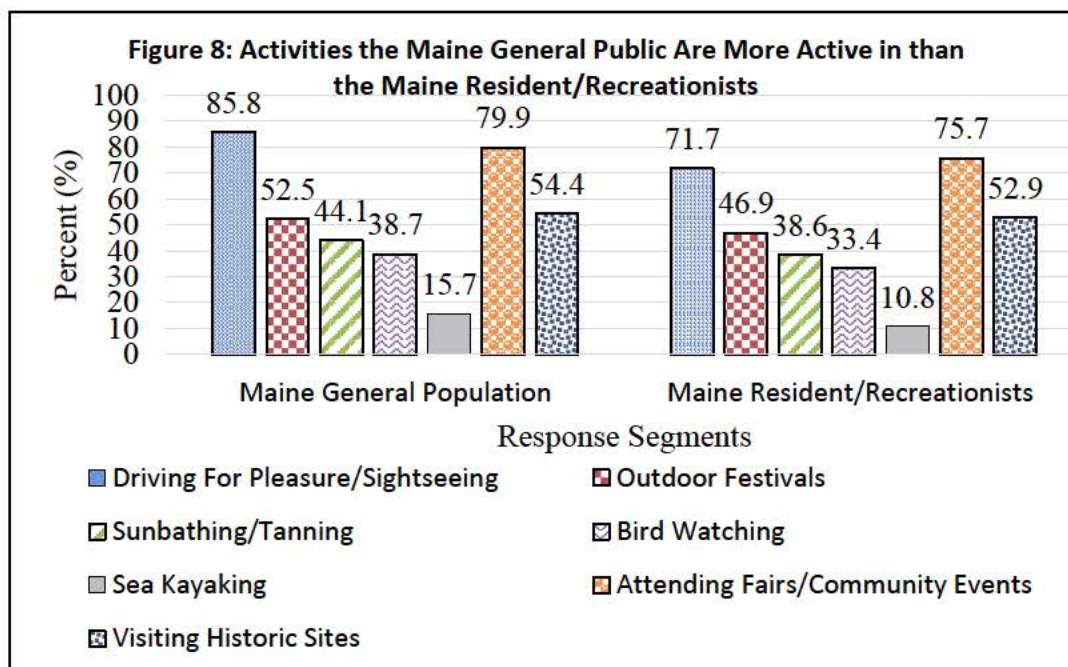
Hunting and fishing continue to be a draw for non-residents visiting Maine, though overall licenses sold to non-resident hunters indicate a roughly 30% drop in licenses sold to non-residents. This reduction is particularly acute for big game licenses, which have dropped roughly 50% from 2004-2013 (28,861 in 2004 to 16,434 in 2013). The number of fishing licenses sold to non-residents have remained fairly steady, hovering in the mid to high 70,000s range of individual licenses sold.

ATV use in Maine by non-residents has been an area of strong recreational growth. The 2004/2005 season saw 5,942 non-resident ATV seasonal registrations. The 2013/2014 figure of 8,997 registrations represents a 50% increase. Approximately 25% (20,902 registrations) of the **snowmobile** registrations in Maine, in 2013/2014, belonged to non-residents.

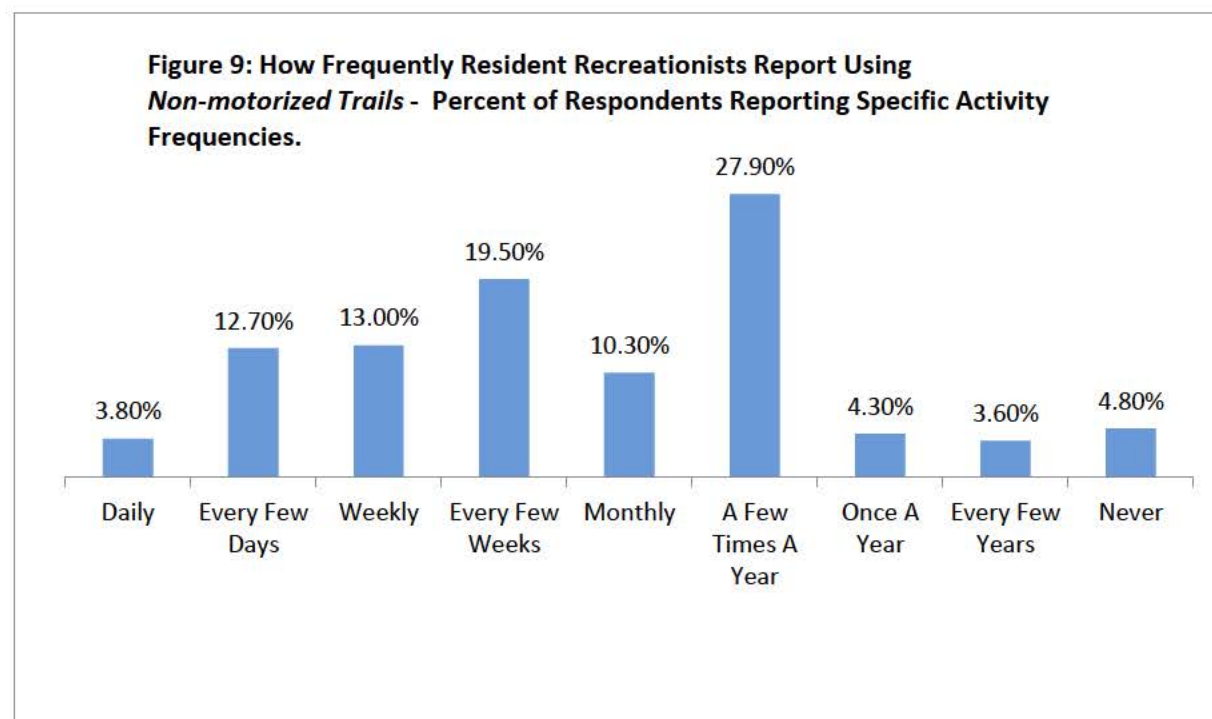
What Outdoor Recreation Activities Engage the Public and How Frequently?

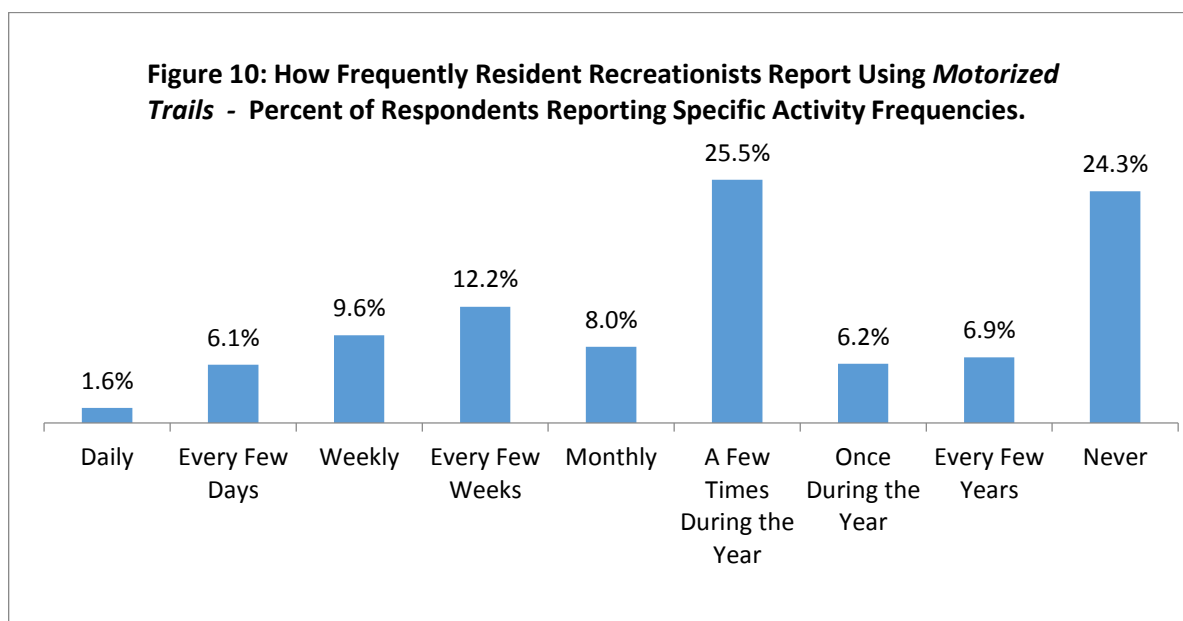
Appendix D lists participation rates for outdoor recreation activities as documented by the National Survey on Recreation and the Environment. This data is a carryover from the previous SCORP, but still serves well as a baseline for outdoor recreation participation. The more recent 2014-2019 ME SCORP Survey (**Appendix B**) also provides insight into activities Maine residents and visitors engage in. The survey structure in which individuals were in one of three groups (purchased email list representing the general population and resident and non-resident “recreationists” groups compiled from ME BPL and ME IFW emails) provides the ability to tease out interesting observations about noteworthy patterns. For example, **Figure 8** shows seven activities where the Maine resident general public is more active than the resident recreationists sample group. The value here is to recognize that while those residents who register ATVs, make an online campsite reservation, buy a fishing license, etc. are on average participating in more outdoor activities than the general Maine population sample, there are activities that are important to the general population and that could get ignored if not properly considered during planning. These activities may also serve well as gateways into other activities. Furthermore, the fact that consumptive and motorized activities have disproportional participation rates in the ME IFW/ME BPL sample indicates that perhaps those agencies should strive to capture more contacts within those segments of the population who do not hunt, fish, register recreational vehicles or register to camp.

²⁷ Ibid.



Though numbers fluctuate with the seasons, the 2014 SCORP survey reports that **almost 50% of residents participate in outdoor recreation at a weekly rate or more**— and that is in the winter. Over 20% of residents participate in outdoor recreation on a daily basis in the summer. More specifically, a look at the frequencies of non-motorized and motorized trail activity is provided in the following two figures.





Constraints/Barriers to Outdoor Recreation

The 2014-2019 ME SCORP survey work specifically inquired about barriers to outdoor recreation. While barriers such as lack of skills, lack of knowledge, lack of interest, and physical difficulty all scored low, over 25% of respondents stated that **“too busy”** or **“not time off from work/school”** were, to a large or very large extent, constraints to their recreating outdoors. **Financial costs** are another significant constraint, particularly with the Maine General Population sample. **Table 8** lists reported levels of constraints.

Table 8: Reported Levels for Factors Limiting Participants' Pursuit of Outdoor Recreation Activities over the past Two Years to a 'Large' or 'Very Large' Extent

RECREATIONAL BARRIERS	Maine General Population (%)	Maine Resident/ Recreationists (%)	Non-Resident/ Recreationists (%)
Difficulty of Access	7.7	7.0	8.0
Family Status	12.4	13.3	13.2
Financial Cost	27	17.4	14.4
Lack of Interest	4.1	2.0	1.9
Lack of Knowledge	4.7	2.7	2.1
Lack of Skills	4.7	2.1	1.2
Lack of Transportation	1.5	1.3	1.5
Not Having Companions	10.3	6.2	4.5
Perceived Danger/Risk	4.7	1.8	1.1
Physical Difficulty	11.7	4.7	3.1
Too Busy	30.8	28	32.6
No Time Off From Work/School	24.1	25	32.9
The Weather	12.3	11.8	5.5

As is shown in the table, there is a lot of commonality between the degree of constraints reported by the three groups. However, it is noteworthy that the Maine General Population sample – a sample shown to be active outdoors but not quite as active as the recreationist resident group - shows higher constraints on several barriers. “Financial cost”, “not having companions”, and “physical difficulty” all were larger barriers to the general population sample versus the recreationists sample. This suggests that it may be wise to consider programs and projects that address these barriers in order to increase outdoor recreation participation.

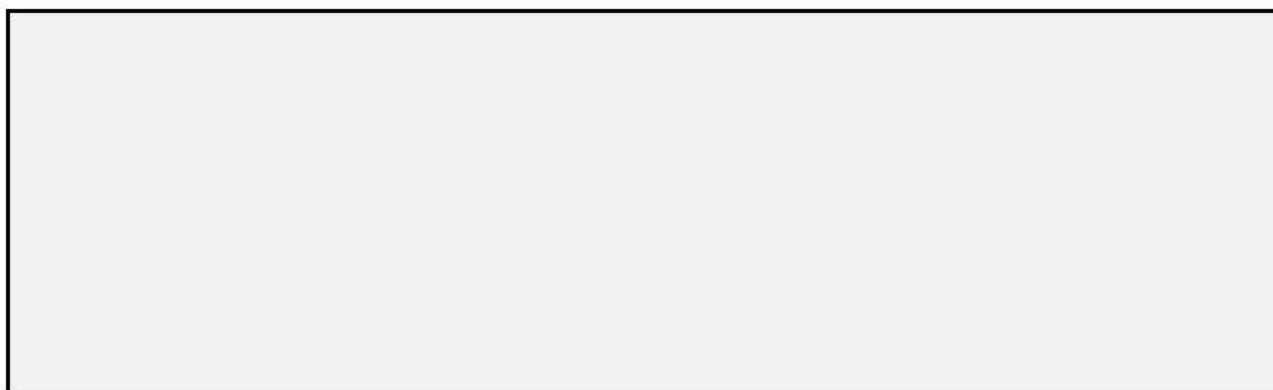
Survey respondents aged 69 and older showed modestly higher rates of reporting “physical difficulty/strain” as a barrier to outdoor recreation. However, they exhibited modestly lower rates of reporting family status or financial constraints. Thus, given Maine’s very relatively aged population dynamics, it may be wise to ensure that there are appropriate resources for older recreationists who may have physical limitations but who have interest in and relatively limited other constraints relative to outdoor recreation.

Though not asked about specifically, ticks, notable the Lyme Disease -carrying deer tick (*Ixodes scapularis*), was mentioned by a number of survey respondents as a worrisome and growing barrier to outdoor recreation. This concern was also expressed early in the planning process by members of the SCORP steering committee.



Engorged Deer Tick- Photo by Griffin Dill (ME Cooperative Extension image)

Part of the 2014-2019 ME SCORP survey inquired about visits to and impressions of Maine State Parks. While very valuable to park management, the data also provides intriguing clues of interest to other land managers and providers of outdoor recreation. For instance, while “lack of knowledge” was only cited by 4.7% of the Maine resident recreationist sample, “lack of knowledge about ME State Parks” was cited by 20.5% of those who had reported not visiting a state park. This discrepancy may indicate that while people often think they are not limited by not knowing where to go, they may well not be aware of specific types of opportunities. In other words, there is a need to promote awareness for specific facilities and destinations so they don’t remain hidden to potential users.



Chapter 2A. Outdoor Recreation Activity Profiles

The following profiles of major outdoor recreation activities in Maine provide further information about the demand for outdoor recreation in Maine. They cover the range of traditional activities, including hunting and fishing, paddling/canoeing (non-motorized boating), trails of all sorts, and viewing and learning activities.





ACTIVITY PROFILE: **CAMPING IN MAINE**

The Outdoor Industry Association's 2012 *Special Report on Camping*²⁸ provides valuable insight into the status of camping in the US. First, the report states that fully 47% of all those making a camping reservation during their last camping trip made that reservation at one of the nation's 7,000 state parks. State park campers numbered 55.3 million in 2009, 52.7 million in 2010, and 54 million in 2011. Sixty six percent (66%) of camping involved tent camping with other significant types included RV camping (12%), backcountry/backpacking (10%), and staying in a cabin (6%).

This same report indicates that 50% of campers had taken a camping trip by age 7. A vast majority (87%) of campers surveyed reported having been camping before the age 16. Fathers were the overwhelming choice (44%) for who/which group took respondents camping for the first time. Mothers (13%) were reported as being chosen more by younger generations versus older generations. Organized groups such as scouts, churches, YMCA/YWCA etc. did not represent double-digit figures with the exception of Boy Scouts – though only 7% of respondents aged 18-34 reported the Scouts as the group that first took them camping. Friends made up 70% of reported camping groups, with spouse/significant other (59%) and immediate family (47%) making up other significant answers to the question of who respondents camped with.



Primitive Campsite on the Maine Coast –
Courtesy Maine Island Trail Association

A majority (60%) of trips were in the 1-2 nights range with only 15% reporting taking trips lasting more than 5 nights. The mean distance traveled for camping trips was 190.6 miles, with 86% of camping trips occurring within 300 miles of home. Predominant motivations for camping included the activity itself (33%) as well as “to escape the grind” (23%). Saving money versus other lodging options was listed by very few respondents. Time-related constraints made up the top three reasons chosen for people taking fewer camping trips.

Survey information collected from 779 Maine respondents between 2002-2009 as part of the *National Survey on Recreation and the Environment* (NSRE) included inquiry into camping activity and indicates that 34.5% of Maine residents participated in developed camping annually. When looking at the entire New England Region, the percentage of the population participating drops to 26.6%. The backpacking participation rate for Maine is 18.3% while New England's rate is 14.5%.

²⁸Outdoor Foundation.(2012). *Special Report on Camping*. Retrieved from <http://www.outdoorfoundation.org/research.participation.html>

Several questions about camping were included in the 2014 email-based survey initiated for this SCORP report. Over 9,000 Maine residents contacted as part of an email-based sample obtained from a combined emailing list from the Maine Bureau of Parks and Lands (BPL) and the Maine Department of Inland Fisheries and Wildlife (IFW) responded to questions about camping activity. Forty-seven percent (47%) indicated they had tent camped at a car-accessible campground within the last two years. Another sample group made up of a commercially purchased, random Maine email list reported participating at a level of 28.4% for the same question. Non-residents reached via the same BPL/IFW mailing list reported tent camping at a 27.8% rate.

This same SCORP survey also showed 34% of the resident BPL/IFW sample tent camping in a remote, backcountry setting. Numbers for the general (random, purchased) resident sample were 16.2% for remote tent camping while the non-resident BPL/IFW sample participated at 18.4%. RV camping without electricity received respective participation rates of 14.8% (BPL/IFW resident sample), 7.4% (general resident sample), and 8.4%. An inquiry into RV camping with water and electric produced responses indicating 16.7%, 14.2%, and 10.5% participation rates. Over a quarter of all respondents, in all of the sample groups, reported having stayed in a yurt or rustic cabin. Younger survey respondents were more likely to report tent camping in remote, backcountry settings.

Survey respondents who reported having visited a Maine State Park were asked a series of questions, including certain amenity questions related specifically to camping. When asked to check amenities they appreciate and/or would like to see offered at Maine State Parks, 27.9%, 29.2%, and 25% of respondents in the three respective samples (BPL/IFW resident sample, general Maine sample, BPL/IFW non-resident sample) checked that they appreciate or would like to see water and electric hook-ups for RV camping. Currently, approximately 14% of Maine State Park campground campsites provide water and electric hookups. Respondents also indicated interest in cabins or yurts at Maine State Parks; between 25% and 30% of respondents in the three samples reported they would like to see rustic cabins or yurts available at Maine State Parks. Currently, essentially none are provided. It is worth noting that numerous private campgrounds in Maine provide water & electric RV hookups and campgrounds and other private entities also provide cabin rentals.

Maine Camping Data - Attendance

Public camping data for Maine paints a mixed picture of the last decade. In a comparison of the averaged camping figures between 2004-2008 with similar figures covering 2009-2013, both Acadia National Park and Baxter State Park showed growth in camping visits (21.1% and 10.21 respectively). However, camping activity diminished in the Allagash Wilderness Waterway (-10.54%) and the non-profit managed North Maine Woods sites on predominantly private forestland in northwestern Maine (-25.62%). Camping at Maine State Parks dropped slightly in the comparison, down 6.2%.



ACTIVITY PROFILE: **Hunting and Fishing in Maine**

Hunting and Fishing Activity in Maine

Based on data from the 2011 *National Survey of Fishing, Hunting, and Wildlife-Associated Recreation*, 233,000 Maine residents participated in hunting and/or fishing. This equates to approximately 22% of the population. Maine saw 341,000 anglers with 197,000 of those anglers being residents. There were 181,000 hunters with 141,000 of those being residents. In 2011, Maine waters supported over 3.8 million days of fishing and the state was home to over 2.5 million days of hunting.

Economic Impact of Hunting in Maine

Research commissioned by the Maine Department of Inland Fisheries and Wildlife and the Maine Office of Tourism shows that hunters spend \$231 million on hunting related activities in Maine. Recreational hunting supports more than 3,400 full- and part-time jobs providing more than \$115 million in income. The direct spending by sportsmen who hunt and the multiplier effects of that spending in Maine contribute \$191 million to the state's gross state product and a total economic output of \$338.7



million.²⁹ This same study indicates that resident and nonresident hunters in Maine are predominantly male and that resident hunters are slightly younger, have lower incomes and more years of experience hunting in Maine than nonresidents. The greatest percentage of non-resident hunters have started hunting in Maine within the last five years.

According to the aforementioned hunting study, *"Resident hunters are more likely than nonresident hunters to take just a day trip to go hunting, whereas, nonresidents are more likely to take an overnight trip to go hunting. For residents and most nonresident hunters who do take an overnight trip, the most commonly utilized accommodation is a relative's or associate's lodging. Nonresidents in Aroostook County most often stay overnight in a sporting lodge or wilderness camp."*³⁰

²⁹Southwick Associates. 2014. *Hunting in Maine in 2013: A statewide and regional analysis of participation and economic contributions*

Produced for the Maine Office of Tourism & Maine Department of Inland Fisheries and Wildlife.

³⁰ Ibid.

Trends

Trends in hunting and fishing participation are mixed in Maine. While fishing remains quite steady with relatively little change in licenses sold, hunting can be seen as declining. However, this is not as simple as counting annual licenses sold. Since 2000, the Maine Department of Inland Fisheries and Wildlife has made available for purchase lifetime licenses for citizens under 16 and over 64. Therefore, as of 2013, there were, for example, 45,378 active Maine resident lifetime hunting licenses. Thus, it is dangerous to infer that the 21,815 drop in resident hunting licenses between 2000 and 2013 is perfectly analogous to a roughly 13% drop in participation over that period. Data does show a notable drop over time in the number of non-resident big game hunting licenses sold. Adding to the precaution to not overestimate hunting license sales decreases in specific categories is data from the National Survey of Fishing, Hunting, and Wildlife-Associated Recreation showing an increase in both hunters in Maine and hunting days (2001-2011). Interestingly, the *National Survey of Fishing, Hunting, and Wildlife-Associated Recreation* shows single digit decreases in anglers and angler days from 2001-2011.³¹

While license and survey data point in slightly different and nuanced directions, it is nonetheless safe to say that hunting and fishing remain important to the economics, character, and traditions of Maine. Though changes have been experienced, there is still strong demand for hunting and fishing opportunities. On the other side of the equation, posting of private land -often in response to misuse and negative impacts coming from irresponsible public use - continues to threaten hunting and fishing opportunities along with other recreational pursuits.



³¹ US Fish & Wildlife Service. 2013. *National Survey of Fishing, Hunting, and Wildlife-Associated Recreation: Maine*. Retrieved from: <http://www.census.gov/prod/2013pubs/fhw11-me.pdf>



ACTIVITY PROFILE: **NON-MOTORIZED BOATING IN MAINE**

Maine Participation & Trends

The most recent data on non-motorized boating participation in Maine comes from the 2014-2019 ME SCORP survey. That work indicates that half of Maine residents report having canoed at least once within the last two years. Freshwater kayaking was reported at a 41% participation rate with 13% 13.2% reporting having gone sea kayaking. Rafting and sailing showed more limited participation, with 10.9% and 10.6% rates respectively.

Survey data from 1995-2009, obtained from the National Survey on Recreation and the Environment, indicated that kayaking was the fastest growing activity in New England over that time period. Canoeing was seventh fastest growing. The recent development of stand-up paddling (paddleboards) has shown modest growth over the past three years. It is an activity that tends to attract a younger demographic.³²

Motivations and Perspectives

The Outdoor Foundation states that exercise/fitness, adventure/excitement, being with family/friends, and being close to nature are-in descending order- the top reported motivations for paddlers. When asked to rate the need for additional non-motorized trail resources, respondents to the 2015-202 ME SCORP survey ranked water trails somewhere in the mid to lower levels of need (overall, 39.1% rated additional “paddle trails without motorboats” as either very needed or needed).

The general Maine resident sample ranked this type of trail 8th most needed out of 10 types listed. Resident recreationists (see Appendix B for group details) ranked paddle trails 7th and, interestingly, non-resident recreationists ranked paddle trails 4th most needed. It is uncertain if the language citing “paddling trails *without motorboats*” (emphasis added) influenced responses of respondents who may value water trails that include both motorboats and paddle craft.



Resting on a Gravel Bar - Moose River

³² Outdoor Foundation (2013). *2013 Special Report on Paddlesports*. Retrieved from: <http://www.outdoorfoundation.org/research.paddlesports.2013.html>

It is also noteworthy that the ME SCORP survey indicates that lakes/ ponds are the highest rated outdoor setting reported in the survey, surpassing both beaches and coastal trails. 69.4% of respondents ranked lakes/ponds as “very desirable” on a 5-point scale running down to “very undesirable”. In fact, “rivers” scored slightly higher than coastal trails and beaches. While coastal resources were rated as overwhelmingly desirable, freshwater settings were rated even higher.

Economic Impact

The Maine Island Trail and the Northern Forest Canoe Trails are water trails of at least national significance. Whereas the Maine Island Trail is a coastal water trail along the coast of Maine, the Northern Forest Canoe Trail is a multi-state freshwater route from Old Forge, New York to Fort Kent, Maine. Both of these trails have had economic impact studies within the last decade.

Reports indicate that the Maine Island Trail directly generates “at least \$674,000 annually in visitor spending impact in the State of Maine, up to potentially \$2.1 million in impact and 27 jobs”³³ and that the Northern Forest Canoe Trail created \$12 million in total economic impact while supporting 280 jobs³⁴ (across the 740-mile length of the multi-state/province trail).

The Moose River Bow Trip:

Insight on Public Information Limitations?

A 2012 BPL visitor research effort on the Moose River Bow Trip in Northern Somerset County provides intriguing insight into a remote, classic paddling route that while renowned amongst canoe enthusiasts, has not been actively marketed as a “water trail”. The Northern Forest Canoe Trail now includes a portion of the circular “Bow Trip”, though the full route has not been heavily promoted to date. An excerpted section of that report’s discussion is below, along with an excerpted table. The study may hint at paddling opportunities, whether regionally or locally significant, being yet another recreation resource in Maine where knowledge and awareness are limiting factors and information is not readily available to those not “in-the-know”.

“The Moose River Bow Trip ... is a destination attracting paddlers who travel significant distances specifically to paddle and camp Many of these paddlers have never been on the river before, though they are largely not new to paddling backcountry rivers. These visitors first learned of the Moose River Bow Trip through friends and family and/or guidebooks and the internet.”

How did you first learn about the Moose River?	
Answer Options	Response Percent
Family/friends	67.3%
Asked local people	2.0%
Exploration	10.2%
Newspaper	0.0%
Campground info/staff	6.1%
Internet	14.3%
Guide book	24.5%
Road signs	4.1%
Local retailers/ B&Bs	0.0%
Magazine	0.0%
Atlas	10.2%

³³ Glassman, Jonathan and Vilas Rao (2011). *Evaluating the Economic Benefits and Future Opportunities of the Maine Island Trail Association. Discussion Paper 2011-28*, Cambridge, Mass.: Harvard Environmental Economics Program, May, 2011.

³⁴ Pollock, Noah (2007). *The Northern Forest Canoe Trail: Economic Impacts and Implications for Sustainable Community Development*. Vermont Tourism Data Center, University of Vermont, Burlington, VT



ACTIVITY PROFILE: TRAIL ACTIVITIES IN MAINE

Maine Participation in Trail-Related Activities

2002-2009 NSRE Participation Data for Maine	
Activity	% Participating (Residents)
Day Hiking	41.3%
Backpacking	18.3%
Walk for Pleasure	87.6%
Running/Jogging	27.7%
Bicycling	38.2%
Mountain Biking	27.7%
Snowshoeing	16.7%
Cross-Country Skiing	14.4%
Horseback Riding on Trails	5.2%
Snowmobiling	28.7%
Drive Off Road (Any Type)	26.7%

The 2009-2014 Maine State Comprehensive Outdoor Recreation Plan provides a fairly recent picture of trail-related activity participation. The data, based on the National Survey on Recreation and the Environment, is shown in the table to the left.

More recent survey work associated with this 2014-2019 ME SCORP provides more detail on trail activity as well insight into both frequency of activity and preferences for trail expansion. Maine residents use non-motorized trails frequently, with over 25% of residents using non-motorized trails at least weekly (motorized trails are reportedly used by 16.9% of residents at a weekly frequency or greater).

2014-2019 ME SCORP Survey		
Activity	% Participating (Maine Resident Recreationists)	% Participating (Maine Residents General)
Hiking	69.3%	66.2%
Mountain Climbing	32.5%	29.9%
Bicycling (Includes Mountain Biking)	38.9%	34.3%
Snowshoeing	46.7%	40.7%
Cross-Country Skiing	25.3%	23.0%
Snowmobiling	31.8%	19.1%
Riding an ATV	34.4%	20.6%

The ME SCORP survey data does not align completely with previous NSRE activity labels, and where it does, there is not always consensus with the data. That being said, the more recent

SCORP data represents greater sample size and is more recent. The 2015 data includes both a general resident sample and a recreationists sample obtained via license and registration data. More methodological detail is available in Appendix B, but a key point is that the recreationist sample reports significantly higher levels of motorized trail activity participation.

In addition to asking recent survey respondents about trail activity participation, the 2014-2019 ME SCORP survey asked respondents to rate to what degree they thought specific types of trails needed to be expanded in Maine (five point scale from “very needed” to “definitely not needed”). Results, for both non-motorized trails and motorized trails, are shared on the following page.



Newly Constructed Footpath in Maine’s Moosehead Lake Region

MOST NEEDED NON-MOTORIZED TRAIL RESOURCES	Maine General Population (%)	Maine Resident/ Recreationists (%)	Non-Resident/ Recreationists (%)
#1 Most Needed	Easy trails in natural settings (71.1)	Easy trails in natural settings (59)	Easy trails in natural settings (43.8)
#2 Most Needed	Educational/nat. history trails (60)	Educational/nat. history trails (54.2)	Moderate day hikes in nature (43.7)
#3 Most Needed	Moderate day hikes in nature (56.2)	Moderate day hikes in nature (53.1)	Educational/nat. history trails (41)
#4 Most Needed	Easy/moderate off road biking (52.2)	Handicapped accessible trails (46.9)	Paddle trails without motorboats (36.9)
#5 Most Needed	Handicapped accessible trails (52.1)	Easy/moderate off road biking (46.3)	Long/remote day hikes (36.6)
#6 Most Needed	Snowshoeing trails (48.1)	Snowshoeing trails (44.6)	Easy/moderate off road biking (31)
#7 Most Needed	Long/remote day hikes (38.2)	Paddle trails without motorboats (42.8)	Handicapped accessible trails (28.4)
#8 Most Needed	Paddle trails without motorboats (37.6)	Long/remote day hikes (42.8)	Remote/multi-day backpacking (28.3)
#9 Most Needed	Groomed X-Country ski trails (37.5)	Groomed X-Country ski trails (38.8)	Snowshoeing trails (23.8)
# 10 Most Needed	Remote/multi-day backpacking (26.5)	Remote/multi-day backpacking (32.6)	Groomed X-Country ski trails (21.1)
MOST NEEDED MOTORIZED TRAIL RESOURCES	Maine General Population (%)	Maine Resident/Recreationists (%)	Non-Resident/Recreationists (%)
#1 Most Needed	Community linking ATV trails (36.8)	Community linking ATV trails (42.3)	Community linking ATV trails (25.7)
#2 Most Needed	Community linking snowmobile trails (30.3)	Community linking snowmobile trails (40.2)	Remote/vista ATV trails (23.9)
#3 Most Needed	Close-to-home snowmobiling (28.4)	Off trail snowmobiling (38.1)	Community linking snowmobile trails (23.2)
#4 Most Needed	Close-to-home ATV (27.1)	Close-to-home ATV (37.5)	Off trail snowmobiling (22.8)
#5 Most Needed	Off trail snowmobiling (25.7)	Remote/vista ATV trails (37.3)	Remote/vista snowmobile trails (20.9)
#6 Most Needed	Remote/vista ATV trails (24.3)	Close-to-home snowmobiling (36)	Close-to-home ATV (19.4)
#7 Most Needed	Shared/groomed snowmobile trails (24.3)	Remote/vista snowmobile trails (33.5)	Close-to-home snowmobiling (19)
#8 Most Needed	Remote/vista snowmobile trails (23.7)	Shared/groomed snowmobile trails (30.8)	ATV/rail trail/shared use trails (17.7)
#9 Most Needed	ATV/rail trail/shared use trails (22.7)	ATV/rail trail/shared use trails (29.9)	Shared/groomed snowmobile trails (16.8)
# 10 Most Needed	ATV trails with challenging terrain (14.7)	ATV trails with challenging terrain (18.7)	ATV trails with challenging terrain (13.9)



ACTIVITY PROFILE: **VIEWING AND LEARNING ACTIVITIES IN MAINE**

National Trends

In the 2010 Renewable Resources Planning Act (RPA) Assessment developed by the US Forest Service, Cordell (2011) discusses seven clustered groups of outdoor recreation activities including: 1) *Visiting recreation and historic sites*, 2) *Viewing/photographing nature*, 3) *Backcountry activities*, 4) *Motorized activities*, 5) *Hunting and fishing*, 6) *Non-motor boating*, 7) *Snow skiing and snowboarding*. Of these seven clusters, Cordell states that:

The clear leader in growth of total annual days was the overall group of activities named “viewing and photographing nature.” The emergence of viewing and learning activities as a leading form of outdoor recreation was a key finding of the RPA recreation demand assessment.³⁵

New England and Maine

This national finding is consistent with Maine/New England recreation data obtained from both the 2009 Maine SCORP as well as survey efforts associated with the 2015 Maine SCORP. 2009 data in the Maine SCORP gathered as part of the National Survey on Recreation and the Environment shows that between 1995 and 2009 the New England region has added 2.1 million participants in the activity of “viewing wildlife (besides birds)”. This was the largest number of participants added in any category. “Viewing/photographing fish” and “viewing/photographing birds” were also in the top activities for participants added.



Bird-watching at Wolf's Neck Woods State Park

When the current SCORP survey respondents were asked about their recreational activity, “enjoying nature” and “viewing wildlife” were in the top 5 activities for all three sample groups (see Appendix B for more detail on samples). “Enjoying nature” was the most popular activity for two of the three groups. Furthermore, the survey results report that educational and instructional programs were by far the most popular types of programs and events people would like to see offered in Maine State Parks (self-guided educational hikes being the most popular choice for all three groups). When asked about types of non-motorized trails

³⁵ Cordell, H. Ken (2011). Outdoor Recreation in the First Decade: A Research Brief in the IRIS Series. Retrieved from <http://www.srs.fs.usda.gov/trends/pdf-iris/IRISRec20rptfs.pdf>.

respondents feel are most needed in the state, both Maine resident sample groups ranked educational trails (natural or historical) as the second most needed trail type -behind only “easy trails in natural settings”.

The 2014 SCORP survey data suggests that while older age groups participate at higher levels in birdwatching, kids and school programs are rated higher by younger respondents (often presumably having children in the home). It is apparent that there is strong and trending demand for outdoor experiences that interpret elements of Maine’s outdoor heritage and that provide the opportunity to participate in that heritage first hand.



Historical Reenactors Rowing a Bateau on the Kennebec River

Chapter 3: Supply of Outdoor Recreation Opportunities in Maine

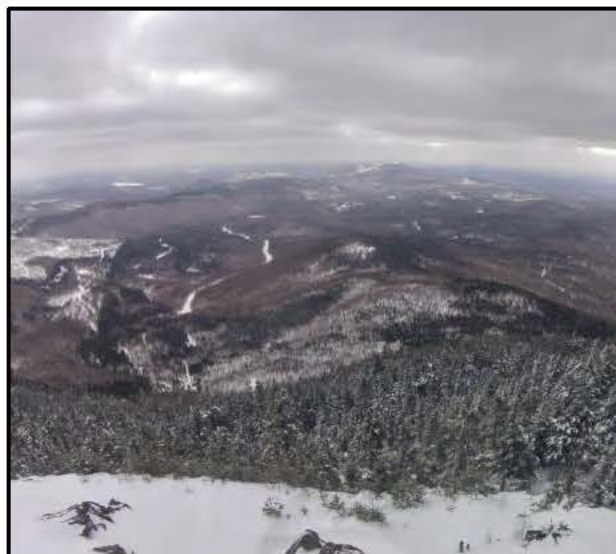
Maine: It's Places and Character

Maine's 20.4 million acres offer a diverse natural environment that supports a wide variety of outdoor recreation activities for residents and visitors. The state's 5,000-mile coast includes miles of sandy beach and rocky headlands, as well as over 3,000 islands. In northern and western Maine, the Longfellow Range of the Appalachian Mountains contains more than 100 mountains over 3,000 feet, and all of the state's "4,000 footers." Maine's inland waters total nearly 1,450 square miles in area and include about 5,800 lakes and ponds and almost 32,000 miles of rivers and streams. Maine also has about 5 million acres of wetlands ranging from small vernal pools to extensive coastal salt marshes. About 90% of the state's land area is forested.



Jewell Island, Casco Bay

The forests of Maine are predominantly privately owned, with private ownership hovering around 95%.³⁶ Maine has the largest contiguous block of undeveloped forestland east of the Mississippi comprised of approximately 10.5 million acres of "unorganized territory" (no city or town government entities). This region's forests are primarily managed for timber production and are typically available for various forms of public recreation. Private forests in more developed portions of the state are also significant in terms of public recreation and other multiple values associated with forests.



Winter View from Mount Blue, Mount Blue State Park

Maine's climate is marked by distinct seasons. Winters are generally cold, with average annual snowfall from 50 to 70 inches along the coast and 60-110 inches inland. Spring comes later than the majority of the Continental United States. Summer temperatures range as high as the 80s along the coast and 90s inland. Fall weather is typically pleasant and cool with dramatic fall foliage occurring in the middle of the season. Maine's pronounced and distinctive seasons greatly shape the character and traditions associated with outdoor recreation.

³⁶ Maine Forest Service (2010). *Maine State Forest Assessment and Strategies*. Forest Policy & Management Division. Retrieved from: <http://www.maine.gov/dacf/mfs/publications/reports>.

Outdoor Recreation Resources Open to the Public in Maine

Maine residents and visitors alike rely on a mix of public and private lands for outdoor recreation. As just one example, roughly 95% of snowmobile trails in Maine are located on private lands. Hunting, fishing, trapping, hiking, birding, snowmobiling, paddling, camping, and a host of other activities routinely occur on private lands open to public recreation not typically through legal agreements but rather via a tradition of public access. At the same time, a mosaic of ownership and private conservation has been growing to create increased conservation and recreation assurances across the state. One major area of conservation growth is in public easements on private lands. Many, though not all, conservation easements have at least some degree of public recreational access guaranteed.

Public Conservation Lands

Federal Lands: Most federal recreation lands in Maine are administered by three agencies: the US Department of the Interior's **National Park Service (NPS)** and **US Fish and Wildlife Service (USFWS)**; and the US Department of Agriculture's **National Forest Service (NFS)**. Federal military and veterans' agencies also administer some lands available for public recreation. The principal federal recreation lands in Maine are **Acadia National Park** (35,332 acres owned by the National Park Service and 12,416 acres of privately owned lands under conservation easement); the Maine portion of the White Mountain National Forest (49,980 acres); and the National Wildlife Refuges (64,660 total acres).

State Lands: The **Maine Bureau of Parks and Lands (BPL)** owns and manages 616,952 acres of Public Reserved and Non-Reserved lands (tracts managed for multiple use including forestry, wildlife and recreation; with no user fees) and 86,233 acres in Parks, Historic Sites, and Boat Access sites, including 968 acres leased from USFWS, which are managed primarily for recreation, subject to user fees. BPL also owns approximately 1,095 acres in coastal islands, some of which are managed under contract as part of the Maine Island Trail. Finally, BPL holds public access easements allowing pedestrian use and vehicular use on designated roads, donated by three large landowners whose combined acreage is 602,423 acres. **Table 9** examines Bureau properties in relation to Maine's most populated cities.

The **Maine Department of Inland Fisheries and Wildlife** is responsible for management on all State owned Wildlife Management Areas. The WMAs comprise approximately 100,000 acres and contain a diverse array of habitats. These properties are available for a multitude of recreational opportunities, with a focus on hunting, fishing and trapping.

Baxter State Park includes 209,644 acres managed as a wilderness park. It is overseen by an authority comprised of the Maine Attorney General, Director of the Maine Forest Service, and the Commissioner of the Maine Department of Inland Fisheries and Wildlife. Management is based on park founder Governor Percival Baxter's deeds of trust. About 75% of the Park (156,874 acres) is managed as a wildlife sanctuary while 25% of the Park (52,628 acres) is open to hunting and trapping with the exception that Moose hunting is prohibited in the Park. 29,537 acres was designated by Governor Baxter to be managed as the Scientific Forest Management Area and is currently a Forest Stewardship Certified showplace for sound forestry.

Table 9: Maine State Parks, Public Lands, and State Historic Sites within 25 and 50 miles of Maine's 10 most populated cities (some adjacent/nearby cities clustered).

Municipality or Cluster of Municipalities	2010 Population (US Census)	BPL Sites w/in 25 miles of one or more listed communities	Additional BPL sites within 25-50 miles of community or cluster
Portland South Portland Westbrook	66,194 25,002 17,494	Bradbury Mt. SP Crescent Beach SP Ferry Beach SP Mackworth Island Pinelands Land Unit Two Lights SP Wolfe's Neck Woods SP Crescent Beach SP Scarborough Beach SP	Range Ponds SP, Eagle Island SHS, Reid SP, Fort Baldwin SHS Sebago Lake SP, Fort Edgecomb SHS, Vaughan Woods SP, Fort Popham SHS, Fort McClary SHS, Popham Beach SP, John Paul Jones SHS, Androscoggin Riverlands SP
Lewiston Auburn	36,592 23,052	Bradbury Mt. SP Pinelands Land Unit Range Ponds SP Androscoggin Riverlands	Popham Beach SP, Reid SP, Colburn House SHS, Scarborough Beach SP, Dodge Point Public Lands, Sebago Lake SP, Two Lights SP, Whaleback Shell Midden SHS, Wolfe's Neck Woods SP, Mackworth Island, Whistle Stop Trail, Fort Popham SHS, Eagle Island SHS, Fort Edgecomb SHS, Fort Baldwin SHS, Kennebec Highlands Public Lands
Bangor	33,037	Bradley Land Unit** ** The Bradley Land Unit does not serve a substantial recreational role, though a snowmobile route does pass over it.	Peaks-Kenny SP, Donnell Pond Lands, Lagrange - Medford Trail, Four Season Adventure Trail, Fort Knox SHS, Fort Point SHS, Lamoine SP, Moose Point SP, Swan Lake SP, Downeast Sunrise Trail
Biddeford Saco Sanford	21,277 18,482 20,798	Crescent Beach SP Ferry Beach SP Mackworth Island Two Lights SP Scarborough Beach SP Vaughan Woods SP	Pineland Public Lands, Wolfe's Neck Woods SP, Fort McClary SHS, John Paul Jones SHS, Range Ponds SP, Sebago Lake SP, Vaughan Woods SP, Bradbury Mountain SP
Augusta	19,132	Fort Halifax SHS Damariscotta Lake SP Colburn House SHS Lake St. George SP	Colonial Pemaquid SHS, Birch Point SP, Fort Edgecomb SHS, Camden Hills SP, Range Ponds SP, Moose Point SP, Bradbury Mt. SP, Reid SP, Dodge Point Public Lands, Whistle Stop Trail, Whaleback Shell Midden SHS, Androscoggin Riverlands SP, Kennebec Highlands Public Lands
SP = State Park, SHS = State Historic Site. SOURCE: www.maine.gov/doc/parks "Find Parks & Lands"			

Not-for-Profit Land Conservation: Land trusts and private conservation organizations have had a major role in both conserving Maine's unique natural areas as well as providing outdoor recreation opportunities. Over 1.5 million acres of land across Maine have been conserved by private conservation organizations and land trusts. Conserved properties range from small easements and holdings held by local land trusts up to landscape scale conservation projects in Maine's North Woods region. It is notable that the 2014-2019 Maine SCORP survey

indicates that just over 50% of residents and over 28% of non-residents report having visited a land trust property within the last two years.



Not-for-profit conservation organizations such as the Appalachian Mountain Club and the Nature Conservancy (to name just two) are playing a larger and larger role in conserving Maine land and providing recreational opportunities. Pictured above: skiing groomed trails at the Appalachian Mountain Club's Katahdin Iron Works property.

small amount of their respective land area under some form of conservation.

Municipal Lands: The Maine Conservation Lands Layer, a geographic information systems data set maintained by the Maine Office of GIS, attributes just over 26,000 acres of lands to municipalities or water districts. It is important to recognize that many municipal lands serving vital recreation needs such as sports fields and playgrounds are NOT included in this figure. Furthermore, the local significance of municipal lands is often not their overall acreage but rather their proximity to citizens.

Where Are Conservation Lands Located?

A simplistic look at where conservation lands are located indicates that conservation lands are spread across every county of the state. A more detailed analysis shows that while it is true that every county in Maine at least some conservation lands, the amounts vary greatly (Table 10). Piscataquis County in central Maine is a very rural county with by far the greatest amount of conservation land (by total acreage and percentage of land area conserved). Large conservation holdings including but not limited to Baxter State Park and numerous Public Lands combined with several very large working forest conservation easements make Piscataquis County the state's most conserved county. Conversely, Androscoggin, Kennebec, and Lincoln counties, in the State's more populated areas, all have a relatively

One factor that accounts for the larger area in conserved lands in the predominantly rural counties such as Franklin, Somerset, Piscataquis, Aroostook, and Washington is the amount of large tracts of managed timberland with working forest conservation easements. In populated counties like Androscoggin, Cumberland, Kennebec, and York, land ownership is more highly fragmented, and conserved lands tend to be smaller.

Table 10: County Analysis of Conservation Lands in Maine.			
County	Acres of Conservation Land (1)	% of County Land Conserved (1)	% of Maine's Total Population Residing within County (2)
Androscoggin	9,189	2.89%	8.10%
Aroostook	581,131	13.33%	5.30%
Cumberland	38,163	6.5%	21.36%
Franklin	142,649	12.81%	2.30%
Hancock	178,758	16.54%	4.10%
Kennebec	22,363	3.68%	9.17%
Knox	18,540	7.71%	2.98%
Lincoln	12,895	4.23%	2.57%
Oxford	263,785	18.98%	4.32%
Penobscot	154,308	6.79%	11.57%
Piscataquis	1,076,556	38.51%	1.30%
Sagadahoc	18,502	11.29%	2.65%
Somerset	818,324	31.31%	3.91%
Waldo	22,830	4.19%	2.92%
Washington	506,953	28.81%	2.44%
York	65,558	10.14%	14.97%
Total:	3,930,504 (Statewide)	18.9% (of State)	
(1) Based on Conservation Lands Layer and town and county (24k-scale) GIS Data (2015), ME Office of GIS. Includes fee and easement properties from all owner types (e.g., federal, state, private, etc.) (2) Based on US Census 2010			

Importantly, when asked as part of the 2014-2019 ME SCORP survey, respondents indicated Cumberland and York as counties identified most strongly as where they most often recreate. *This supports the logical proposition that general outdoor recreation demand is strongest where more people live and work.*



Public Use of Private Lands

Maine has long enjoyed a tradition of public access to privately owned lands. Whether provided by small woodlot owners or commercial timber companies owning hundreds of thousands of acres, there has been a tradition of the public enjoying private lands. However, there has been a recognition that negative impacts from recreation (e.g., littering and dumping, etc.) coupled with changes in land ownership, particularly intergenerational transfers on family held lands, may present risks to that tradition. It is important to recognize that private lands play a major role in meeting Maine's demand for outdoor recreation. Hunting, fishing, hiking, camping, ATV and snowmobile trail use, wildlife watching, and many more activities occur on private lands. Additionally, private forest road networks provide access to not only private lands but also public lands and publicly held easements. Ensuring good relations with landowners through shared stewardship, education and communication is essential to continuing this long Maine tradition.



Public Outdoor Recreation Sites

While acreage in conserved lands is a measure of the availability of outdoor recreation opportunities, it is not the only measure. Conserved lands figures miss a range of outdoor recreation resources in Maine. **Municipal parks, open space, playgrounds, sports fields, and courts** serve to address community recreation interests beyond the nature-based interests typically addressed via conserved lands. These are the types of projects most often supported by Land and Water Conservation funds. This report does not include an exhaustive accounting of these resources. However, previous **Land and Water Conservation Fund** project figures are shown in **Table 11** and discussed below.

Table 11: LWCF Expenditures by County (1966-2013)	
Androscoggin	\$2,499,034.82
Aroostook	\$3,416,096.93
Cumberland	\$7,913,734.51
Franklin	\$1,457,215.33
Hancock	\$836,581.99
Kennebec	\$2,956,920.49
Knox	\$1,927,153.86
Lincoln	\$1,078,465.78
Oxford	\$1,564,739.38
Penobscot	\$3,822,912.54
Piscataquis	\$3,475,106.71
Sagadahoc	\$1,070,597.06
Somerset	\$1,031,419.89
Waldo	\$1,559,173.45
Washington	\$1,988,458.39
York	\$3,265,914.39

LWCF funding has enabled projects in every county in Maine. The figures in Table 11 do not include local match funds and are not reflective of total project costs. Expenditures listed do include both Bureau of Parks and Lands projects as well as other projects awarded to municipalities. Individual project funds distributed range from just over \$1000 to two acquisition projects over \$1 million (Allagash Wilderness Waterway and West Branch). Figures were not adjusted for inflation. The average project award over the Maine's LWCF history is just over \$50,000.

Figure 11 shows an overview of where individual LWCF project sites in Maine are located.

Trail Junction, Ferry Beach State Park



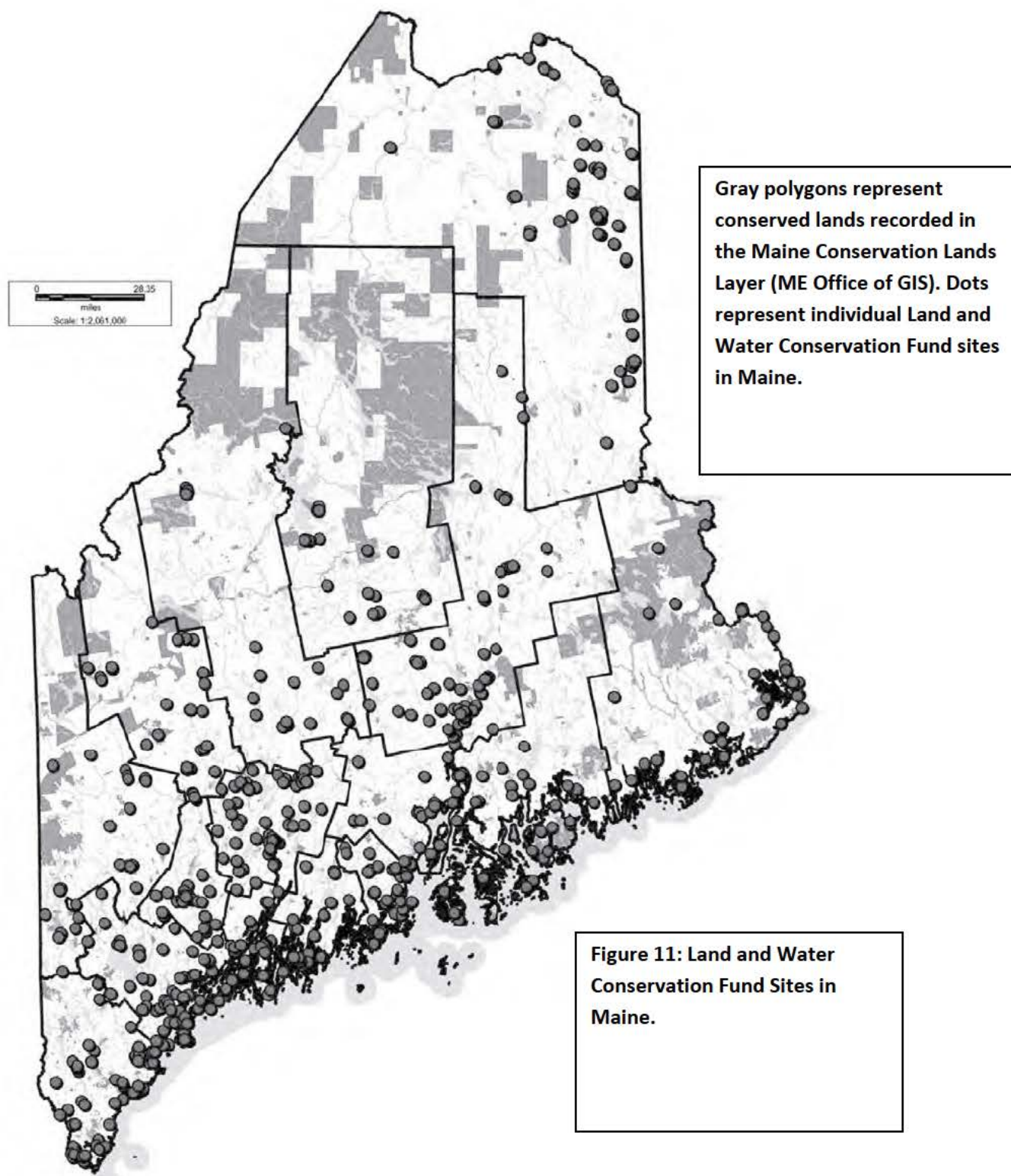
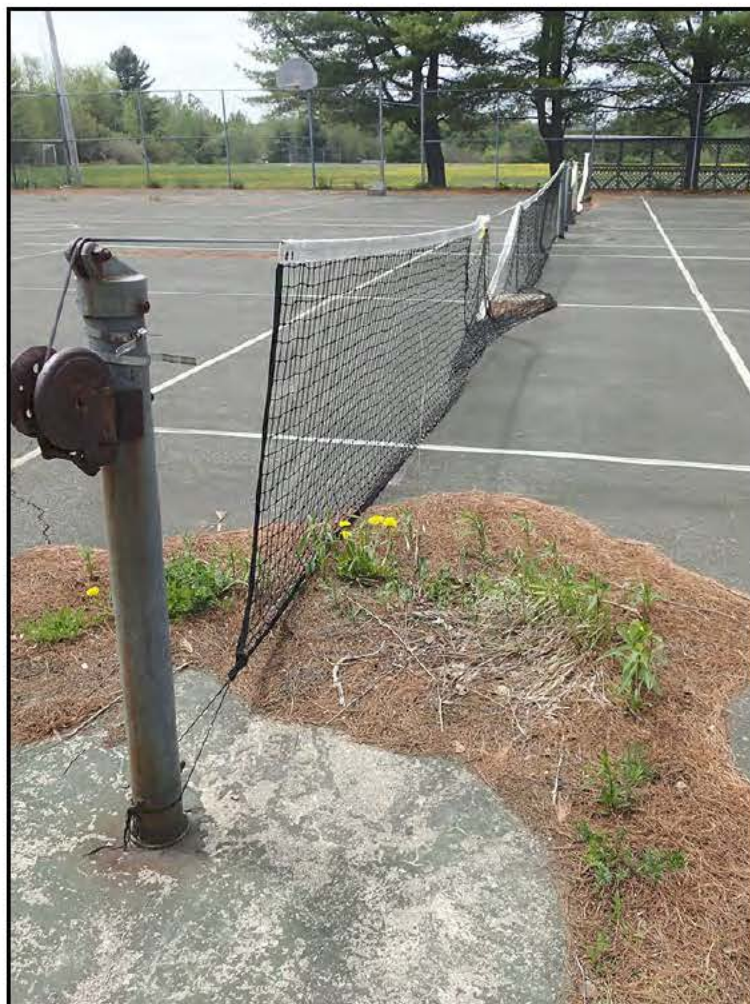


Figure 12 shows the evolving pattern of the types of LWCF projects in Maine across 5 decades. LWCF funding level changes have had a direct influence on projects but so have changes in demand/recreation interests. In keeping with evolving demand, projects such as tennis courts rose in prominence (especially in the 1970s in the case of courts). The 1980s saw growth in sports fields and playgrounds, with these project types remaining strong into the '90s and 2000s (relative to other category types). Skate parks emerged as a new use in the 2000s.

What is not reflected in Figure 12 is that trends evolve and that demands addressed at a given point in time may not reflect future demand. Aforementioned tennis courts, for example, are now quite often observed as being lightly used and poorly maintained in many settings. While some tennis court projects -as just one example facility type- are being well used and cared for, the point is to recognize that some of the current supply of permanently protected LWCF sites are not addressing current demand and trends in outdoor recreation. The re-purposing of outdated recreation infrastructure is increasingly an issue that confronts the managers of some of the State's older LWCF projects.



Aging and Derelict Tennis Court

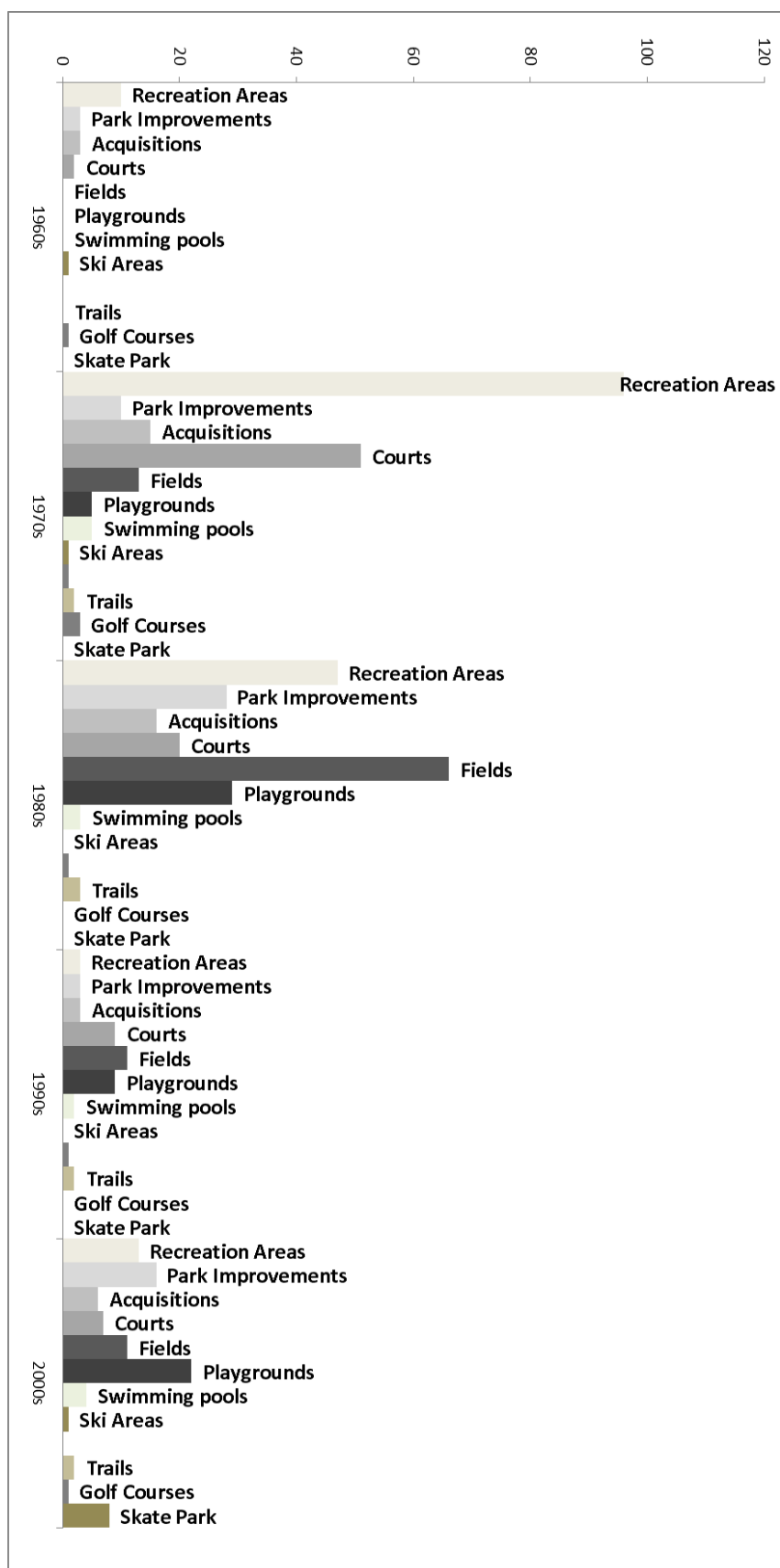


Figure 12: Number of Maine LWCF Projects by Type, by Decade.

Activity Specific Resources

Skiing: Skiing is one of Maine’s more popular “developed” outdoor recreation activities (2008 National Survey on Recreation and the Environment reported New England participation rates of 13.6%). Maine **downhill ski areas** range from a handful of surviving small community hills with rope tows or t-bars that operate occasionally to two of the region’s largest ski resorts, Sunday River and Sugarloaf USA.

Maine has 18 operating downhill ski areas open to the public that can be characterized as small, medium, and large according to the number of trails and lifts. Sunday River and Sugarloaf USA each have over 130 trails and 15 or more lifts. Medium size areas include Mt Abram, Saddleback, and Shawnee Peak, which have 30-66 trails and 4-5 lifts each. The remaining ski areas have 1-3 lifts and 20 or fewer trails³⁷. Most ski areas now have some level of snowmaking and designated snowboard areas.

Ski Maine Association lists 16 **Nordic ski centers** in Maine with a total of 665 km of groomed ski trails (**Table 12**).

Facilities range from “mom and pop” operations to major facilities including the Nordic Heritage Center (NHC) in Presque Isle, a world-class venue for cross country skiing, and biathlon; and the Maine Huts and Trails system with the plan to develop a continuous groomed cross-country ski system from Bethel in western Maine to the Greenville area, presently having four huts in the Bigelow to Jackman area. In addition to those listed by Ski Maine, Maine State Parks maintains groomed ski trail systems at Mt. Blue State Park (Weld), Sebago Lake State Park (Naples), Bradbury Mountain State Park (Pownal), Lily Bay State Park (Beaver Cove), Aroostook State Park (Presque Isle), Camden Hills (Camden), Cobscook Bay (Dennysville), and Range Pond (Poland). In addition, several community trail areas/projects include groomed ski trails. Examples include Quarry Road in Waterville, Bond Brook Recreation Area and the Viles

Arboretum in Augusta, and trails in the Millinocket area maintained by Northern Timber Cruisers.

Table 12: Nordic Ski Centers in Maine

Nordic Ski Center & Location	Trail KM	County
10th Mountain Division -Fort Kent	23	Aroostook
Bethel Nordic Ski Center- Bethel	33	Oxford
Black Mountain of Maine- Rumford	18	Oxford
Carters Cross Country Center -Bethel	55	Oxford
Carters Cross Country Center- Oxford	30	Oxford
Five Fields Farm- Bridgton	27	Cumberland
Harris Farm XC Center- Dayton	40	York
Hidden Valley Nature Center- Alna	24	Lincoln
Lost Valley Touring Center- Auburn	10	Androscoggin
Maine Huts & Trails- Carrabassett Valley	72	Franklin
Maine Wilderness Lodges (AMC)- Moosehead Lake	100	Piscataquis
New England Outdoor Center- Millinocket	10	Penobscot
Nordic Heritage Venue- Presque Isle	20	Aroostook
Pineland Farms- New Gloucester	25	Cumberland
Rangeley Lakes Trail Center- Rangeley	67	Franklin
Spruce Mountain Nordic- Jay	5	Franklin
Sugarloaf Outdoor Center- Carrabassett Valley	90	Franklin
Titcomb Mountain Nordic- West Farmington	16	Franklin
Source: Ski Maine Association		

³⁷ Retrieved from: <https://skimaine.com/ski-areas/>

Golf Courses: Golf, like skiing, is also one of Maine’s more popular “developed” outdoor recreation activities (2008 National Survey on Recreation and the Environment reported New England participation rates of 17.4%). According to the Maine State Golf Association, Maine has 125 golf courses. Maine golf courses have been predominantly developed by the private sector. The Maine State Golf Association lists 6 municipal golf courses (Bangor, Dexter, Frye Island, Riverside in Portland, South Portland, and Val Halla in Cumberland). It also lists 12 private clubs, 84 public courses, 7 resort courses, and 16 semi-private courses.³⁸

Swim beaches: Swim beaches are a popular traditional destination for much of Maine’s population . There are 15 Maine Bureau of Parks & Lands properties within 50 miles of one of Maine’s ten most populated cities and provide swimming opportunities. Of those State beaches, 8 serve multiple large communities in southern Maine, and 6 have lifeguards (staffing cuts over past years have reduced lifeguard positions, notably at most freshwater swim facilities).

In addition to state parks, federal, municipal, and private landowners own swim beaches. In particular, municipalities are major providers of swimming opportunities. It is worth noting that the Maine Department of Environmental Protection (DEP) lists Maine as having more than 29 miles of public access beaches stretching along Maine’s coast³⁹. Sixty beach management areas participate in the (DEP) Maine Healthy Beaches Program. This listing refers primarily to beaches and does not account per se to the full range of swimming opportunities along the coast nor does it account for freshwater beaches and swimming holes.

Playgrounds: While this report does not tally the total number of playgrounds in Maine, these resources are nonetheless important assets to communities. The Maine Bureau of Parks and Lands has playgrounds at 15 of its parks. Through 2013, the LWCF fund has supported the construction of 73 playground projects, with at least one playground project in every Maine county.

Camping Facilities: Maine is home to a variety of *commercial and public campgrounds* as well as numerous *commercial sporting camps*.

Table 13: Commercial Campgrounds in Maine by Region

Region	# Campgrounds
Aroostook	6
Downeast/Acadia	28
Katahdin/Moosehead	24
Kennebec Valley	12
Mid-Coast	21
Portland & Freeport	8
South Coast	45
Western Lakes & Mountains	36
<i>(Source: Maine Campground Owners Association - http://www.campmaine.com)</i>	

Commercial campgrounds in Maine play an important role in meeting camping demand and supporting the tourism economy. The Maine Campground Owners Association reports 180 campgrounds in Maine, **(Table 13)** not including State Park Campgrounds or Federal sites such as Seawall and Blackwoods campgrounds in Acadia National Park. Taken as a whole, privately operated campgrounds in Maine provide more developed facilities than public campgrounds such as State Park campgrounds. Amenities such as

³⁸ Retrieved from: <http://www.mesga.org/>

³⁹ Maine Department of Environmental Protection. (2015). *Maine Healthy Beaches 2014 Report to US EPA*. Retrieved from: <http://www.mainehealthybeaches.org/resources.html#reports>

water/electric/sewer/cable tv hook-ups, pools, recreation halls, laundry, and other amenities are more likely to be found at private sector campgrounds. Cabin/cottage rentals are more prevalent as well.

Maine State Park campgrounds are found at 13 State Parks spread across 8 counties. Generally speaking, Maine State Park campgrounds provide traditional camping experiences with a focus on natural settings. Playgrounds, trails, boat launches, and hot showers (11 of the 13 campgrounds) are examples of facilities found at many but not all park campgrounds. Water hookups and electric service is available at a portion of the campsites at Sebago Lake State Park and Camden Hills State Park; other park campgrounds do not have hook-up campsites. Limited (and popular) reservable group campsites are found at 10 of the 13 campground parks. Maine State Parks offer no cabins or cottages for rent; the national average number of such rentals in other state park systems is 169.⁴⁰

Commercial sporting camps have a long tradition in Maine, most notably in the Aroostook, western mountains, Moosehead, Katahdin, and Downeast regions. These cabin/lodge based operations are typically located in remote areas renowned for hunting and fishing opportunities. They are strongly tied to the Maine Guide traditions and can include rustic yet up-scale lodging and dining. The Maine Sporting Camp Association lists 43 member camps.

Trailside Lodges: Within the last decade, two new examples of trail-focused lodging have developed. **Maine Huts and Trails** is a not-for-profit organization developing a multi-use/multi-season, non-motorized trail system of interconnected lodges in western Maine. The huts are described as eco-lodges or “boutique hostels”.⁴¹ The **Appalachian Mountain Club** (not-for-profit) has acquired thousands of acres of land in the “100-Mile Wilderness” Region between Moosehead Lake and Baxter State Park with a series of Maine Wilderness Lodges and lodge-to lodge skiing and other lodge-based activities as a preeminent recreational opportunity on their properties.

Pedestrian trails: Trails available for **walking, jogging, hiking, snowshoeing** and/or other pedestrian uses are highly valued by a broad sector of Maine recreationists and visitors recreating in Maine. At this time, there is no definitive inventory of trails in Maine. However, it is possible to share trails listed on Maine Trail Finder – a popular and growing website serving as a web-portal for finding trails across the state. Maine Trail Finder, created and managed by the Maine Center for Community GIS includes all Maine Bureau of Parks and Lands’ over 450 miles of human-powered trails as well as similar trails managed by organizations ranging from non-profits to municipalities to Acadia National Park (partial listings). It does not list a few notable destinations such as Baxter State Park’s approximately 200 miles of trails or all of the 281 miles of the Appalachian Trail in Maine.

⁴⁰ Leung, Yu-Fai, Jordan Smith, and Anna Miller. (2015). *Statistical Report of State Park Operations:2013-2014*. Prepared for the National Association of State Park Directors, Raleigh, NC.

⁴¹ Retrieved from: <http://www.mainehuts.org/about-mht/>



Singletrack Mountain Biking
(Courtesy Augusta Trails)

Mountain bike trails have seen an upsurge thanks to the growth of mountain bike clubs across the state. Currently, there are chapters of the New England Mountain Bike Association in the following Maine areas: Bethel area, Carrabassett Valley region, Central Maine (Kennebec County area), Greater Portland, Mid-Coast area, Penobscot region. Most of these clubs have formed within the last five to seven years. Notably, these clubs have worked with landowners including but not limited to municipalities, the Maine Bureau of Parks and Lands, and land trusts to develop purposefully built singletrack trails well suited to modern mountain biking as well as snowshoeing and trail running (in particular).

Table 14: Non-motorized Trails Listed on Maine Trail Finder
(www.maintailfinder.com)

ME Tourism Region	Walking/ hiking Trails (Mi.)	Nordic Ski Trails (Mi.)*	Mountain Bike Trails (Mi.)**
Aroostook	98	46	49
Downeast & Acadia	480	231	193 (All wide trails, not narrow singletrack)
Greater Portland & Casco Bay	226	129	127
Kennebec & Moose River Valleys	151	56	73
Maine's Lakes and Mountains	693	308	201
Mid-coast	281	127	40
The Maine Beaches	86	62	27
The Maine Highlands	237	108	76
Total	2,252	1,067	786

Figures do, in some cases, include non-motorized opportunities shared on the same trail as motorized activity. Figures may also include "double or triple counting" (i.e., the same mile of trail may fall into more than one category above).

**Does not necessarily imply groomed trails.*

*** Does not necessarily imply all narrow, "singletrack" trails.*

Table 14 lists Maine Trail Finder trail statistics for walking, cross-country skiing and mountain biking, by region.

The 2014-2019 ME SCORP Survey, while largely focused on outdoor recreation participation and demand, also provides insight into perceived supply. Respondents were asked to evaluate the need for new trail resources by type. The relative need for specific types of new trail resources are listed in **Table 15**.

Table 15: Non-motorized Trail Resource Types Rated as Either “Needed” or “Very Needed”			
Trail Resource Type Ranking	Maine General Population Sample (% Sample Ranking “Needed” or “Very Needed”)	Maine Resident/ Recreationists Sample (% Sample Ranking “Needed” or “Very Needed”)	Non-Resident/ Recreationists Sample (% Sample Ranking “Needed” or “Very Needed”)
#1 Most Needed	Easy trails in natural settings (71.1)	Easy trails in natural settings (59)	Easy trails in natural settings (43.8)
#2 Most Needed	Educational/nat. history trails (60)	Educational/nat. history trails (54.2)	Moderate day hikes in nature (43.7)
#3 Most Needed	Moderate day hikes in nature (56.2)	Moderate day hikes in nature (53.1)	Educational/nat. history trails (41)
#4 Most Needed	Easy/moderate off road biking (52.2)	Handicapped accessible trails (46.9)	Paddle trails without motorboats (36.9)
#5 Most Needed	Handicapped accessible trails (52.1)	Easy/moderate off road biking (46.3)	Long/remote day hikes (36.6)
#6 Most Needed	Snowshoeing trails (48.1)	Snowshoeing trails (44.6)	Easy/moderate off road biking (31)
#7 Most Needed	Long/remote day hikes (38.2)	Paddle trails without motorboats (42.8)	Handicapped accessible trails (28.4)
#8 Most Needed	Paddle trails without motorboats (37.6)	Long/remote day hikes (42.8)	Remote/multi-day backpacking (28.3)
#9 Most Needed	Groomed X-Country ski trails (37.5)	Groomed X-Country ski trails (38.8)	Snowshoeing trails (23.8)
# 10 Most Needed	Remote/multi-day backpacking (26.5)	Remote/multi-day backpacking (32.6)	Groomed X-Country ski trails (21.1)
For Survey Details, See Appendix B.			

Water Trails: The State of Maine does not have an official **water trails** designation. Likewise, there are not substantial numbers of water trails in Maine registered in any official capacity with federal or other programs. Notable exceptions include the state-administered/federally designated Allagash Wilderness Waterway (designated as a wild river in the federal Wild & Scenic River System), the 740-mile Northern Forest Canoe Trail (with approximately half its length in western/northern Maine), and the 375-mile Maine Island Trail (America’s oldest water trail). There are also significant state and internationally managed resources such as the Penobscot River Corridor and St. Croix International Waterway as well as other traditional paddling routes with conserved lands and recreational access (even if not thought of formally as a water trail).

Within the last several years, interest in water trails appears to be growing. Maine Trail finder now lists 10 unique paddling destinations on its site as part of a pilot expansion into water trail listings. This includes large

trails such as the Maine Island Trail and Northern Forest Canoe Trail as well as smaller trails in more developed portions of the state (such as the Royal River in Cumberland County). *It is worth emphasizing that Maine has a vast and amazing array of water recreation opportunities. These resources have traditionally been used by generations of outdoorsmen and outdoorswomen but Maine lags many other states in terms of water trails with organized management and stewardship.*

Equestrian Trails: Trails built first and foremost for Equestrian (horseback riding) use are rare in Maine. However, horseback riding is an allowed use of shared-use roads on Maine Public Lands as well as over 300 miles of multiple-use rail trails owned and managed by the Maine Bureau of Parks and Lands (through its Off-Road-Vehicle program). Additionally, trails are available at Mt. Blue, Camden Hills, and Bradbury Mountain State Parks. In some cases, local equestrian interests have coordinated with ATV trails to support trail construction and maintenance that can safely accommodate horses.

Snowmobile Trails: There are nearly 14,000 miles of maintained **snowmobile trails** available throughout Maine. Many of the trails interconnect providing a statewide network linking even beyond Maine's borders into Canada and New Hampshire. This growing network of trails is the product of a cooperative program between snowmobile clubs, municipalities, private landowners and the Bureau of Parks and Lands.

Table 16: Designated ATV & Snowmobile Trails by County		
County	Trail Miles (ATV)	Trail Miles (Snowmobile)
Androscoggin County	67	589
Aroostook County	1475	1904
Cumberland County	102	640
Franklin County	474	1008
Hancock County	350	343
Kennebec County	65	725
Knox County	0	230
Lincoln County	6	288
Oxford County	420	1514
Penobscot County	705	1966
Piscataquis County	550	1247
Sagadahoc County	65	160
Somerset County	635	1498
Waldo County	85	469
Washington County	910	739
York County	152	440
Total	6,061	13,760

ATV Trails: Maine has over 6,000 miles of maintained **ATV trails** across the state. As with snowmobile trails, ATV trails provide major recreational options for residents and visitors alike while injecting economic activity into local communities. **Table 16** lists ATV and snowmobile trail miles by county.

As with non-motorized trails, the 2014-2019 ME SCORP Survey provides insights into what survey respondents view as priority needs relating to the supply of motorized trails in Maine. Table 16 shares trail needs by ranking.

Table 17: Motorized Trail Resource Types Rated as Either “Needed” or “Very Needed” (Ranked)			
Trail Resource Type Ranking	Maine General Population Sample (% Sample Ranking “Needed” or “Very Needed”)	Maine Resident/ Recreationists Sample (% Sample Ranking “Needed” or “Very Needed”)	Non-Resident/ Recreationists Sample (% Sample Ranking “Needed” or “Very Needed”)
#1 Most Needed	Community linking ATV trails (36.8)	Community linking ATV trails (42.3)	Community linking ATV trails (25.7)
#2 Most Needed	Community linking snowmobile trails (30.3)	Community linking snowmobile trails (40.2)	Remote/vista ATV trails (23.9)
#3 Most Needed	Close-to-home snowmobiling (28.4)	Off trail snowmobiling (38.1)	Community linking snowmobile trails (23.2)
#4 Most Needed	Close-to-home ATV (27.1)	Close-to-home ATV (37.5)	Off trail snowmobiling (22.8)
#5 Most Needed	Off trail snowmobiling (25.7)	Remote/vista ATV trails (37.3)	Remote/vista snowmobile trails (20.9)
#6 Most Needed	Remote/vista ATV trails (24.3)	Close-to-home snowmobiling (36)	Close-to-home ATV (19.4)
#7 Most Needed	Shared/groomed snowmobile trails (24.3)	Remote/vista snowmobile trails (33.5)	Close-to-home snowmobiling (19)
#8 Most Needed	Remote/vista snowmobile trails (23.7)	Shared/groomed snowmobile trails (30.8)	ATV/rail trail/shared use trails (17.7)
#9 Most Needed	ATV/rail trail/shared use trails (22.7)	ATV/rail trail/shared use trails (29.9)	Shared/groomed snowmobile trails (16.8)
# 10 Most Needed	ATV trails with challenging terrain (14.7)	ATV trails with challenging terrain (18.7)	ATV trails with challenging terrain (13.9)
For Survey Details, See Appendix B.			

Boating Facilities: Access to an individual pond, river, stream, bay, etc. for general boating, fishing access, and other water-based recreation is an important component of Maine’s outdoor recreation mix. Maine has strong demand for recreation on the water and as a result, there has long been a major effort to provide boating access to the state’s water bodies. **Table 18** lists total boating facilities as well as hand-carry only boating sites.

Table 18: Public Boating Access Sites by County		
County	Public Boat Launch Sites (All Types- Including Trailerable Ramps)	Hand-Carry Only Sites
Androscoggin County	13	3
Aroostook County	58	13
Cumberland County	39	6
Franklin County	22	9
Hancock County	61	12
Kennebec County	51	15
Knox County	16	4
Lincoln County	15	1
Oxford County	40	12
Penobscot County	49	9
Piscataquis County	63	23
Sagadahoc County	11	3
Somerset County	46	13
Waldo County	18	3
Washington County	79	25
York County	21	2
Total	602	153

Access to remote ponds and other destinations via aircraft is a long-time Maine tradition tied to both recreational use and commercial operations (in association with sightseeing, transportation to sporting camps, private camps, etc.). Though data is limited in this area, it is a noteworthy resource to be documented here.



Sunset on Moosehead Lake near Lily Bay State Park

Chapter 4: Implementation Strategies

The 2009-2014 Maine SCORP, which this plan updates, used “connectivity” as a framework theme tying together priorities for outdoor recreation in Maine. Connectivity was recognized as a key element for trail-based recreation and habitat conservation (on which so much outdoor recreation activity in Maine is based). Furthermore, connectivity was identified as a way to organize thinking about how Maine citizens and visitors alike interact with and understand outdoor recreation opportunities. Finally, connectivity served as a construct encapsulating the social and community elements stemming from Maine’s strong sense of place and outdoor traditions.

This plan update re-affirms the theme of connectivity. Priorities identified five years ago largely remain priorities today. While these priorities are not all carried over completely unchanged and new points of emphasis have been defined, the overall thrust remains consistent. Maine still needs to ensure earnest efforts are made to connect outdoor recreation with Mainers lives and communities.

Additionally, outdoor recreation remains a core focus for tourism and economic development – which further enhances the capacity of communities to grow and serve not only Mainers, but visitors to our state, and in so doing, expands our local, regional, and statewide economies.

Priority Area 1: Connect More Mainers of All Ages with the Health and Wellness Benefits of Outdoor Recreation



Maine needs to address health issues and outdoor recreation can be part of the road to improvement. Outdoor recreation provides multiple benefits to individuals and society. Time spent engaged in physical outdoor activities improves health and wellness. Simply having more experiences in outdoor settings provides emotional and psychological benefits that positively impact many health issues exhibited in an increasingly sedentary population. Experiences out in nature are positively correlated by researchers with childhood stress relief⁴², coping with Attention-Deficit- Disorder⁴³, Attention-Deficit/Hyperactivity-Disorder, and obesity prevention.⁴⁴

Maine has realities and challenges associated with health and wellness. Maine’s population is the oldest in the nation measured in terms of median age (42.7 years). According to 2013 population estimates, 17.3 percent of Maine’s population is 65 years of age or older, compared to 13 percent nationally. “Baby boomers,” aged 46 to 64 in 2010, are the largest segment of Maine’s population, while youth, under age 18, are the smallest. A large majority of Maine’s baby boomer population was over 50 years of age in 2010⁴⁵.

⁴² Wells NM & Evans GW (2003). *Environment and Behavior*, 35(3):311-330

⁴³ Taylor AF, Kuo FE & Sullivan WC (2001). *Environment and Behavior*, 33(1):54-77.

⁴⁴ Council on Sports Medicine and Fitness and Council on School Health (2006). *Pediatrics*, 117(5):1834-1842.

⁴⁵ Retrieved from: <http://maine.gov/economist/projections/index.shtml>

An increasingly older population is predicted, with increasing health and disability issues. Approximately 20 percent of Maine residents 65 years of age and older have an ambulatory disability.

Maine's population also has the highest-in – New England adult obesity rate, at 28.9 percent -placing it at number 27 out of all states on the obesity scale.⁴⁶ Childhood obesity, among children aged 10 to 17 years old, was 12.5 percent in 2011, ranking 42nd among all states.

Given the imperative to serve an aging population and to address inactivity and obesity across generations, and given the demonstrated positive impacts of outdoor recreation, it is essential that public and private entities strive to provide outdoor recreation opportunities where youth and adults of all abilities can get out, get active, and experience the health benefits found in the outdoors. That includes reducing the need to drive to designated recreation areas. It also includes improving connectivity between outdoor recreation assets and neighborhoods within towns, as well as with other recreation, cultural and economic assets within those towns or in neighboring towns.

Strategies

A. Encourage Increased Participation in Outdoor Activities by Raising Awareness of Outdoor Recreation's Health & Wellness Benefits:

- Encourage collaborative efforts between recreation and health groups in order to increase participation by appealing to a range of motivations. Collaboration and coordination between groups such as the Maine Department of Health and Human Services; Department of Agriculture, Conservation, and Forestry; Department of Inland Fisheries & Wildlife; and Department of Education (and others) as well as collaborations amongst other recreation and health organizations should result in enhanced awareness of health benefits from being outside.
- Continue and enhance programs in which doctors can “prescribe” park passes as a tool for enhancing health and wellness, especially of youth patients.
- Partner with YMCAs, gyms, etc. to promote the values of indoor AND outdoor recreation for a healthy lifestyle and fitness goals.
- Better integrate with and support the capacity for schools to make outdoor recreation a meaningful part of health education. Additionally, look to integrate outdoor recreation into all academic content areas.
- Foster and support the growth of clubs and groups utilizing outdoor recreation resources (e.g., trails, water access, etc.) for healthy activities such as weekly walking/biking groups, outdoor yoga, scheduled paddling outings, etc. Promote dialog between resource managers and group organizers to facilitate healthy lifestyle oriented events. Look for opportunities to develop recreation sites well-suited to formal and informal group activity.
- Develop outreach strategies identifying audiences, messages, and delivery mechanisms that will get beyond preaching to the choir and attract more people to become more active in the outdoors.

⁴⁶ Retrieved from: <http://healthyamericans.org/reports/>

- Promote educational efforts to assuage fears and showcase benefits in order to help combat certain cultural trends that undercut outdoor recreation. Efforts to raise appreciation of outdoor recreation should recognize that there are fears and misconceptions that may keep some potential participants from enjoying outdoor recreation opportunities. Fears ranging from “stranger danger” (youth abductions) to insect bites need to be addressed via education and awareness campaigns.
- Develop professional, targeted messages at specific audiences to emphasize why getting outside is part of a healthy, fulfilling lifestyle. Coordinate and collaborate with agencies and individuals understanding the science of messaging and communication.
- Develop programming that introduces the outdoors in a FUN and unthreatening way, especially when targeted at audiences lacking outdoor recreation experience.

B. Improve Awareness of Existing Outdoor Recreation Opportunities:

- Provide readily available information on access to public lands and water. New media as well as traditional information dissemination routes are tools for getting information out to broad swaths of the public. If one goal is to reconnect more Mainers with the outdoors, it is logical to assume that some may need more of a guiding hand than existing activity enthusiasts, who largely know where to go. This is supported by research looking into rural youth in Maine, who were shown to lack awareness of where to go for outdoor recreation.⁴⁷
- Improve signage, kiosks, and other on-site public information in order to increase public awareness and enhance visitor experiences. Many Maine sites need improvement in this area, including wayfinding signage, improved maps, interpretive messages, safety information, and use guidelines.
- Recognize that outdoor recreation, even when associated with public resources such as parks, is a product that requires marketing; use best practices of communication, branding, and marketing to connect potential users with existing resources.
- Improve the quality and availability of GIS-based (Geographic Information System) data and maps. GIS systems serve as an underpinning of mapping efforts aimed at enhanced publicly available maps, brochures, websites, and global positioning systems data. Coordinating various public and private GIS-based mapping efforts, would benefit public information efforts by supporting improved management efficiency.
- Encourage municipalities to develop and maintain a data base and guide for outdoor recreation opportunities within their boundaries and to make this information available to their residents, businesses and visitors. Further, encourage data sharing between municipalities and the state for regional and statewide planning efforts.



⁴⁷ Muskie School of Public Service. 2008. *Active Living for Rural Youth* Retrieved from: <https://muskie.usm.maine.edu/Publications/rural/pb37/ActiveLiving.pdf>

C. Support Programs and Expand Opportunities that Provide Youth with Experiences that Connect Them with Nature:

- Continue youth outreach programs such as Take It Outside!, and Hooked on Fishing. These programmatic efforts build community support for outdoor recreation, celebrate life-long, healthy activities, develop skills and knowledge needed to enjoy the outdoors, and link outdoor recreation activities with environmental stewardship.
- Look for new partnerships to reach more youth, perhaps with schools, youth groups, parent networks, etc. Research by the Outdoor Industry Foundation finds that parents, friends, and relatives, are by far the strongest factors influencing youth to be active outdoors.⁴⁸
- Consider opportunities to use technology as a conduit to the outdoors. Despite the problems associated with too much time spent in front of screens, there are opportunities to use technology as a tool for getting some youth outside more. Smart phone apps, geocaching or Earthcacheing (both involving sleuthing using a GPS receiver), digital photography and video use, and social networking can have value in getting get kids outside.
- Support new recreation infrastructure aimed at activities of interest to youth, such as biking, hiking trails close to home or school, and sports oriented facilities that can be adapted over time to changing interests.
- Provide outdoor recreation opportunities of specific interest to working parents. Working parents are a key piece of the youth issue. This could include family friendly trails near home, as well as at state parks and lands within a short drive of population centers. Running trails sized to accommodate strollers are an example of how this demographic might be reached.
- Continue to support traditional sports and sports facilities such as baseball/softball, soccer, etc. but also look for opportunities to support non-traditional “sports” and extracurricular activities such as outing clubs, mountain bike teams, etc. Especially target facilities and programs that target youth not well served by traditional physical activities.
- Recognize that Maine’s rural character with dispersed residences in many communities creates scenarios where students travel long distances on buses to reach and return from school and other community resources. Explore opportunities such as “late” busses and/or other creative transportation approaches to address youth “stuck” with no means for reaching recreation resources. This is especially relevant for lower-income families struggling with transportation costs and/or work schedules.
- Work with all levels of education to support hands-on student stewardship programs engaging students directly in the care and enjoyment of natural areas.

⁴⁸ Outdoor Industry Foundation (2008) *Outdoor Recreation Participation Study*.

D. Provide a Broad Range of Outdoor Opportunities to Meet the Varied Interests and Abilities of Adults, Especially the Older and Less-Abled Public:

- Provide more opportunities suitable for Maine's seniors. Programs, partnerships, and facilities well suited to specific senior interests should be developed and/or promoted. Recreation opportunities for Maine seniors should encompass mind and body and provide a range of settings and identified attributes. Viewing and learning activities such as guided nature walks and bird watching as well as resources such as easy walking/hiking trails are particularly attractive to older recreationists.



- Provide outdoor recreation opportunities of specific interest to working adults including young professionals and working parents. Working parents are a key piece of the youth issue. Additionally, recreation is a significant factor in quality of life, and research shows that businesses not tied to a specific resource (e.g., technology firms) value quality of life highly as they consider where to locate or relocate⁴⁹. Therefore, providing desirable recreation opportunities for this demographic has benefits not just as a health strategy but also as a business attraction strategy. Quality of life and outdoor recreation opportunities are and should remain a competitive advantage for Maine. In particular, vibrant town centers with close to town/close to home recreation amenities such as parks and trails can fit well into the time-limited lifestyles characterizing modern professional and personal life.
- Support investments in rehabilitation and construction of trails and other recreational amenities designed for the physically challenged and disabled populations. Support development of easy to moderate nature trails in a variety of close to home settings, as well as at destination sites located in more remote areas of the state.
- Support improvements to State and municipal parks to address changing interests and needs of the recreating public. Specific priorities identified in the 2014 Maine Outdoor Recreation Survey include modern bathrooms and bath houses with running water, and flush toilets; water and electric hook-ups at campgrounds; family-friendly cabins, tents, and yurts; availability of more interpretive programs and self-guided nature trails; and availability of equipment rentals.

E. Connect Mainers with Close to Home Outdoor Recreation Opportunities:

- Facilitate access to trails and open space; local access not requiring driving is especially of interest. The call from American Trails for trails within 15 minutes of every American home and workplace, and from The Trust for Public Land for access to park and open space within a 10 minute walk are both soundly based in the evidence that proximity is directly related to use. Trails at the local level that are convenient to the local

⁴⁹ Crompton, John L., Lisa L. Love, and Thomas A. More. "An Empirical Study of the Role of Recreation, Parks and Open Space in Companies' (Re) Location Decisions," *Journal of Park and Recreation Administration*, 1997: 37-58.

population are vitally important for their recreational benefits in and of themselves, but also may serve to provide alternate transportation to other proximate outdoor recreation areas, parks, playgrounds, and similar recreational facilities.

- Recognize that Maine experiences long winters and ensure that outdoor opportunities for Nordic skiing, snowshoeing, ice-fishing access, sledding, skating, snowmobiling, and other winter pursuits are important recreational opportunities. Support efforts to develop recreation opportunities to combat inactivity during the winter months.
- Minimize barriers to connectivity and recreation arising from poor policies or design. Notable, but not exclusive, barriers include those affecting bicyclists and pedestrians. Improved bike and pedestrian access to parks and outdoor recreation areas, especially in more urban areas, benefits health and quality of place objectives while potentially opening up more areas to those without motorized transportation.
- Support efforts to prioritize local trail planning that serves the recreation needs of citizens throughout Maine, with an eye toward those initiatives that also serve to increase access to key community attributes.
- Understand that the tradition of public recreational access to private land is essential if all Mainers, especially those in many rural areas, are to have close to home recreational opportunities ranging from fishing to trail running to snowmobiling. Support landowner relations efforts at all levels from community grassroots to formal state programs.

Priority Area 2: Support Regionally Connected Trail Systems in Maine's Less Developed Regions to Increase Access to Outdoor Recreation for Maine's Rural Population and Enhance Economic Development

Maine is blessed with natural and cultural attractions around which trails of all types have been constructed, including significant regional trails networks. The Appalachian Trail traverses just over 300 miles in Maine; this trail system, along with over 40 related side trails is a segment of a nationally significant hiking system. The state ITS snowmobile trail system provides thousands of miles of well-organized riding. In the last half-decade, ATV trails have become more statewide and organized in scope. On the water, both the Maine Island Trail Association (coastal waterway) and the Northern Forest Canoe Trail (freshwater lakes and rivers) systematically address stewardship, development, information, and outreach. These established trails and other "thematic" trails including scenic byways, natural and cultural history trails, etc. provide valuable recreational opportunities for Maine residents, and also play a role in attracting visitation to Maine's most rural communities.

In Maine's more rural regions, with few exceptions, these regional trails, often linking to and through Maine's Public Reserved Lands, are the backbone of recreation opportunities (as compared to Maine's more developed regions where most state and municipal parks are located). While Maine is known for these regional trails systems, there is opportunity for improvements. These systems still have gaps, and there are opportunities to add more connectivity with local trails and to enhance trail opportunities in these rural regions to reach more

potential users. A more connected system can also help address, at a regional level, the need for support networks capable of realistically dealing with ongoing maintenance.

Coordinating existing trails and filling literal or experiential gaps could have the potential to increase the user base for these trails, enhance tourism (and related economic benefits), and engender volunteerism and trail stewardship.

Implementation Strategies:

A. Support Regional Initiatives:

- Support initiatives and larger visions involving multiple communities as a means of addressing both regional and local recreation and tourism objectives. One example is provided by the Northern Forest Canoe Trail (NFCT), a non-profit organized to foster waterway stewardship, support rural economic development, and celebrate community recreation, arts, and heritage along traditional Native American canoe routes linking upstate New York and Maine. NFCT actively works to link paddlers with guides, outfitters, lodging, and other business interests along the trail. Opportunities to integrate trails, whether motorized, non-motorized, multi-use, birding, etc., with local communities should be pursued as they become available.
- Invest in sound planning that will enhance regional trails systems. Support trail system visioning and planning efforts that link tourism and recreation interests by region, and provide a comprehensive vision for trail systems across the state.

B. Encourage and Support Coordinated Management of Extended Trail Systems:

- Support partnerships and alliances that will facilitate coordinated or consolidated collection and management of trail information (GIS and other trail related information). Invest in developing inventories of the full suite of trails available, the condition of those trails.
- Support efforts to coordinate expertise for trail construction, management, and maintenance. As more alliances/partnerships and systems are developed, availability of technical expertise should increase for more trail groups (especially volunteer groups).
- Support coordinated efforts to develop public information on trails through well-designed web and/or print products.



- Support efforts to bring together diverse elements within a community or region to better manage recreation trails. Bringing together business interests, tourism stakeholders, land owners and managers, recreation groups, municipal officials, and other local players results in a coordinated vision for stewardship of regional trails and can also provide the resources needed to support that vision.

- Foster awareness and appreciation for the perspective of private landowners engaged in trail projects and work to ensure landowner concerns are addressed. Continually communicate and collaborate to improve the recreating public's appreciation for use of private lands.

C. Support and Encourage Landowner Collaborations:

- Create and maintain processes that facilitate trail projects across various ownerships, and that minimize conflicts among user groups. Given that trails often are located on private lands (including private conservation organizations), and given that even different public land managers have diverse goals, there is a need to develop mechanisms for better coordination and collaboration in trails planning.
- Support education and awareness efforts aimed at recreationists using private lands to help minimize negative recreation impacts on private lands. Look for opportunities to integrate and coordinate programs such as the national Leave No Trace and Tread Lightly programs as well as existing state landowner relations efforts.
- Encourage organized recreation groups and clubs to be proactive in landowner relations - these groups have an important role in educating users to help minimize and mitigate recreation impacts, and in communicating with landowners.

Priority Area 3: Connect to Future Tourism Markets through Recreation Interests

The Maine Office of Tourism notes, in its Five Year Strategic Plan (2014-2019), notes that of the 4.7 million visitors to Maine from New England, 96 percent are repeat visitors, with little expected increase in the percentage of first-time visitors. However, global demand for authentic nature- and heritage-based experiences is growing and Maine is well positioned to meet this demand. *"Maine's assets critical to attracting visitors include its natural landscape . . . , natural resources . . . and wildlife . . . and the means for enjoying these things [recreation trails, drives/byways]."*⁵⁰ The report concludes that, based on consumer trends,

"tomorrow's" visitors will want:

- *Special interest experiences – traveling with/for a purpose*
- *Interactive learning experiences*
- *Authentic, unique experiences*
- *Physical or psychological challenges*
- *Customized, individualized travel"*

⁵⁰ Retrieved from: http://visitmaine.com/assets/downloads/Maine_5yrPlan.pdf

The report further identifies the growth target for future visitors to be Millennials, and international travelers. . It is noteworthy that non-residents who did not purchase a hunting or fishing license, register a snowmobile or ATV, or camp at a Maine State Park campground were not represented in the University of Maine 2014-2019 Maine SCORP Survey. Furthermore, the survey would not have reached non-residents who have not previously visited Maine, regardless of whether they fish, hunt, camp, etc. In light of this, the Maine Office of Tourism's profile of "tomorrow's visitors" provides insights on how to target new visitors to increase economic activity through outdoor recreation-related tourism.

Implementation Strategies:

A. Foster and Support Mechanisms that Enhance "Base Camp" Communities as Centers of Information for Regional Recreation Opportunities:

- Support efforts to bring together diverse elements within a community or region to better promote recreation. Business interests, tourism stakeholders, land owners and managers, recreation groups, officials, and a host of other local players can produce richer projects with more potential for positive community impacts.
- Support the development and management of visitor centers and similar central facilities for orienting visitors to the story of and opportunities in a region.

B. Expand and Diversify Maine's Outdoor Recreation Offerings to Appeal to Emerging Trends, Especially Target Visitor Profiles:

- Create a state water trail branding program or similar initiative to develop and promote water trails. Ensure proper partnerships and management capacity guidelines are woven into any initiative. Focus on "low-hanging fruit" where community/regional groups can come together to better package existing opportunities primarily requiring collaboration, public information, and planning to develop a coordinated experience that will attract expanded community enjoyment and increased economic activity.
- Use partnerships between public land managers/agencies and recreation interests to respond to the growing demand for adventure races, festivals, and other events in which event organizers ranging from birders to mountain bikers seek destinations for pre-scheduled competitions and events.
- Continue to explore and expand "trail" opportunities like the Maine Birding Trail. Consider developing and marketing itineraries pairing outdoor recreation with other aspects of Maine such as cuisine, traditional crafts, agriculture, etc.



Priorities for Use of Land Water Conservation (LWCF) Fund Monies

A. Strategically Use LWCF Funds for Recreation Areas or Facilities that Provide New or Expanded Outdoor Recreation Opportunities, with Priority for Opportunities:

- that serve youth, seniors, the disabled, or other demographic components that are underserved;
- that increase access to recreation and natural areas, particularly in areas close to population centers;
- that provide multiple public benefits in addition to recreation benefits – i.e., address public health issues (e.g., obesity), economic development (e.g., nature-based tourism, quality of place), and protection of ecological values; or
- that increase connectivity among trail systems or expand regional trails systems, especially in Maine's more rural areas..

B. Support the Rehabilitation or Replacement of the State's Outdoor Recreation Infrastructure, Including Improvements for Accessibility under the Americans with Disabilities Act.

- Rehabilitation or replacement of Maine's aging outdoor recreation infrastructure, including the provision of ADA-accessible trails and facilities, should be a high priority in the upcoming years. The 2006 white paper, *Sustaining Maine's Green Infrastructure*, lists \$40 million in need over 5 years for State Parks and Historic Sites⁵¹. It also lists \$6 million for MDOT related nature tourism infrastructure (over 4 years). These figures do not represent the significant needs for rehabilitation and improvements to municipal facilities. Therefore, rehabilitation and/or replacement of existing resources should continue to be a focus of LWCF funding.



⁵¹ Harris, Jody (Ed.). 2006. *Sustaining Maine's Green Infrastructure: A white paper prepared for the Governor's Steering Committee on Maine's Natural Resource-based Industry*. Maine State Planning Office, Augusta, Maine.

APPENDIX A: PLAN PROCESS

Initial Background Research & Planning

The initial phases of plan creation involved staff review of the 2009-2014 Maine SCORP, review of state and national trends and issues identified in various reports and research, and a review of the issues affecting outdoor recreation and conservation in Maine. This initial process informed the overall thrust of research and discussions brought to the SCORP Advisory Committee for input.

Contracted Survey Research

In 2014, staff from the School of Forest Resources at the University of Maine partnered with the Bureau of Parks and Lands (BPL) to conduct an online resident survey on outdoor recreation to inform the SCORP planning process. Data collection occurred in April 2014. The survey examined recreational preferences in terms of outdoor recreation activities, amenities, and settings; and Maine State Park use and perceptions of services offered. Participants reported their gender, age, income, education level, and place of residence in addition to carefully chosen questions associated with outdoor recreation participation and preferences.

Methodology

An online questionnaire was developed considering BPL's data needs, and the instrument was reviewed by BPL personnel prior to distribution. The questionnaire was sent via SurveyGizmo to three different samples of Maine residents and out-of-state recreationists. **A total of 16,345 participants completed and submitted the survey**, yielding a 15% response rate for the recreationist sample and 4.93% for the general public (see Appendix B for more details on sampling methodology, results, and analysis). Approximately 60% of the respondents were Maine residents. Data were checked, cleaned and analyzed; responses to open-ended questions were transferred and analyzed.

Data Reporting

The University of Maine produced a study report (attached to this report as Appendix B) and held meetings to share results with BPL and Maine Inland Fisheries and Wildlife staff as well as SCORP steering committee members. Two meetings were held, one in Bangor and one in Augusta. University researchers also provided raw data to BPL staff.

Web Postings

As the process of updating the 2009-2015 Maine SCORP gained momentum, the Maine Bureau of Parks and Lands (BPL) updated its permanent SCORP webpage to reflect the upcoming revision, to share information on the SCORP process, and to encourage participation. In addition to a posting of the active SCORP, the Bureau posted a copy of the University of Maine SCORP survey findings as that became available.

Steering Committee

A SCORP steering committee was established in the early phases of the SCORP process. The Committee served to advise on the overall focus and tenor of the emerging plan, evaluation of current priorities, and identification of major issues associated with outdoor recreation in Maine. Committee members included:

- Rex Turner, Outdoor Recreation Planner (SCORP coordinator, writer), Maine Bureau of Parks and Lands
- Katherine Eickenberg, Chief of Planning and Acquisitions, Maine Bureau of Parks and Lands
- Doug Beck, Supervisor of Outdoor Recreation (LWCF program manager), Maine Bureau of Parks and Lands
- Kaitlyn Bernard, Maine Program Associate, Appalachian Mountain Club
- Greg Sweetser, Executive Director, Ski Maine Association
- Kara Wooldrik, Executive Director, Portland Trails
- Leif Dahlin, Community Services Director, City of Augusta
- Phil Savignano, Senior Tourism Officer, Maine Office of Tourism
- Jessica Steele, Director of the Outdoor Adventure Center, Unity College
- James Tasse Ph.D., Education Director, Bicycle Coalition of Maine
- Greg Shute, Outdoor Programs Director, The Chewonki Foundation
- Dan Parlin, President, Topsham Trailriders ATV/ Snowmobile Club
- Al Cowperthwaite, Executive Director, North Maine Woods, Inc.
- John Daigle, Associate Professor of Forest Recreation Management, University of Maine School of Forest Resources
- Judy Sullivan, Program Director, Maine Adaptive Sports & Recreation

Summary notes from steering committee meetings are attached to the end of this appendix, Appendix A.

Report Drafting

Report drafting took place over the first half of 2015. Research and analysis, especially continued analysis of the robust survey responses, occurred concurrent with drafting.

Public Comment Period

A draft final plan was available online for public review and comment. The plan availability for comment was promoted via Bureau press releases and online.

Submittal to National Park Service

After review and comment by the public, and review and adoption by the State of Maine by and through its Governor, the Plan was submitted to the National Park Service for approval.

2015 MAINE STATE COMPREHENSIVE OUTDOOR RECREATION PLAN (SCORP)

STEERING COMMITTEE MEETING

City of Augusta City Hall
16 Cony Street, Augusta, ME
5/8/14 1:00 PM

MEETING SYNOPSIS:

1. Introductions

Committee Members (Y=Present, N=Not Present)

Rex Turner	Outdoor Recreation Planner (SCORP coordinator, writer)	Maine Bureau of Parks and Lands	Y
Katherine Eickenberg	Chief of Planning and Acquisitions	Maine Bureau of Parks and Lands	Y
Mick Rogers	Supervisor of Outdoor Recreation (LWCF program manager)	Maine Bureau of Parks and Lands	N
Kaitlyn Bernard	Maine Program Associate	Appalachian Mountain Club	Y
Greg Sweetser	Executive Director	Ski Maine Association	N
Kara Wooldrik	Executive Director	Portland Trails	N
Leif Dahlin	Community Services Director	City of Augusta	Y
Phil Savignano	Senior Tourism Officer	Maine Office of Tourism	N
Jessica Steele	Director of the Outdoor Adventure Center Unity College	Unity College	Y
James Tasse Ph.D.	Education Director	Bicycle Coalition of Maine	Y
Greg Shute	Outdoor Programs Director	The Chewonki Foundation	Y
Dan Parlin	President	Topsham Trailriders ATV/Snowmobile Club	Y
Al Cowperthwaite	Executive Director	North Maine Woods, Inc.	N
Jonathan LaBonté	Executive Director	Androscoggin Land Trust	Y
John Daigle	Associate Professor of Forest Recreation Management	University of Maine School Of Forest Resources	Y
Lucas Labree	Marketing Manager	Johnson Outdoors Watercraft, Inc.	Y
Judy Sullivan	Program Director	Maine Adaptive Sports & Recreation	Y

2. SCORP overview/Q&A.

- Rex Turner overviewed the purpose of a SCORP plan, including the federal - state relationship and requirements associated with the Land and Water Conservation Fund. Discussion included the required components of a SCORP plan as well as state legislative reporting requirements accomplished via a SCORP report. Historic and recent funding levels were explored.

3. Goals & strategies for 2015-2019 SCORP (process)

- Rex Turner led a discussion on proposed plan strategies. Strategies include using the current plan (created in 2009) as a starting point; recruiting an “topic area expert” and “stakeholder” model to comprise the steering committee; utilizing pertinent, existing reports and data; identifying select, key areas for deeper exploration (likely via focus group meetings), public meetings and website promotion; and adding to the 2009 National Survey on Recreation and the Environment survey data with a deeper survey investigating more fully patterns, perspectives, and behaviors associated with outdoor recreation in Maine.
- Steering committee member and project contractor Dr. John Daigle from the University of Maine shared details on the process of and preliminary results from a large email-based survey effort underway (see above).

4. “What has changed in the last 5 years? A preliminary look back at outdoor recreation in Maine.”

- Rex Turner walked the group through the 2009-2014 Maine State Comprehensive Outdoor Recreation Plan strategies and highlighted sample projects, many of which were not directly funded by the Land and Water Conservation Fund, in line with the strategies/actions identified in 2009.

5. “Magic Wall” Brainstorming Activity: Group

- Group members were asked to brainstorm trends, issues, and opportunities and then write their ideas on cards to be placed on a sticky wall under the corresponding category. Trends, issues, and opportunities were defined as:
 - Trends: how outdoor recreation is developing or changing
 - Issues: problems potentially affecting outdoor recreation

- Opportunities: where conditions are ripe for improving outdoor recreation in Maine.
- After group members finished the exercise, the group discussed the idea cards and clarified/added to the comments on the cards.
- A listing of brainstormed trends, issues, and opportunities is attached at the end of this document.

6. Next steps (scheduling, correspondence, follow up, etc.)

- There was a quick discussion of next steps, with no specific date chosen for the next meeting. Email-based follow-up to ensue.

Organizer/contact:

Rex Turner- Outdoor Recreation Planner
Maine Bureau of Parks and Lands
22 State House Station, Augusta, ME 04333-0022.
287-4920 rex.turner@maine.gov

Brainstormed Issues, Trends, and Opportunities: ME SCORP Steering Committee, 5/8/14
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Note: issues, trends, and opportunities are separate columns and do not correspond across rows.

<u>Issues</u>	<u>Trends</u>	<u>Opportunities</u>
Economic priority: “what will make a positive impact in the short and long-term?” Also a <u>trend and opportunity</u>	Increase of multi-use trails/activities (e.g., ATV/other, singletrack mt. bike/trail running, etc.)...Could increase conflict....Could warrant increased education such as PSAs.	Joint coordinated funding opportunities. Multiple outdoor-oriented groups all pulling in the same direction...common cause for access and co-existence.
Youth are at risk of being disconnected from nature. What does this imply for the future?	Interest in trails across Maine and interest in “ultra activities” (extreme races, etc.) nationally. Strong (sports) community/fraternity component.	Connecting the wild with the urban- spaces near urban areas as a resource people are aware of...with programs and activities near home.
Backcountry impacts...increase in recreational impacts to backcountry settings...poor behaviors.	Boomers (Baby Boom generation)...physical capacity now may require more adaptive trails	Close to home opportunities.
Overuse and degradation of existing trails combined with poor trail design (often from older trails lacking proper design)	State-wide ATV trail progressing	Old railroad beds as trails (Downeast Sunrise Trail example). Amtrak...not all stations are bike friendly. Trains & tourism are possible links.
Mixing motors and non-motorized users...bike fear and issues associated with traffic	Social media...sharing-places, adventure, photos...also an <u>opportunity</u> to engage users with enticing content and networking	More state park access with group (organization) passes. Make easier for groups such as town recreation departments.
Compliance, education, and lack of enforcement capacity		There is room for growth due to lack of awareness about outdoor recreation opportunities.
Ticks & Lyme Disease...health risks, fear. <u>Opportunity too</u> – awareness and education, trail design		Improved/expanded outdoor education programming at state parks and private campgrounds.

<u>Issues</u>	<u>Trends</u>	<u>Opportunities</u>
Emerald ash borer introduction from firewood...implications to forest ecology, town budgets. Additionally, milfoil and other invasive aquatic plants and animals.		More youth-oriented, entry-level experiences...Physical education is down at many Maine schools...opportunity for “lifetime sports” outdoor component in school curriculum.
Inaccessible trails – Eastern Trail bollard spacing and tricycles example.		Geocaching and other technology to get kids engaged in the outdoors
Consistent signage directing travelers to trail heads...especially in the north woods/interior regions.		Engaging new participants
How to draw attention to/utilize the resources we already have? Underutilized resources needing promotion.		“Digital natives” ...urban life...urban areas with outdoor recreation is an advantageous mix for attracting professionals.
Appreciation & respect for...landowners, communities, economic significance of recreation. Opportunity: extoll Maine’s strong landowner liability laws.		
Landowner permission...incentivize?		
Transportation...big barrier for those not able to drive for health and/or economic reasons. Fuel costs a limiting factor too.		
Access & awareness...knowing where to go, good web information, welcoming on-site signage & settings		

**2015 MAINE STATE COMPREHENSIVE OUTDOOR RECREATION PLAN
(SCORP)**

STEERING COMMITTEE MEETING

DACF Office
Harlow Building
Augusta, ME
4/29/15 1:00 PM

MEETING SYNOPSIS:

1. Introductions/agenda review

Committee Members (Y=Present, N=Not Present)

Rex Turner	Outdoor Recreation Planner (SCORP coordinator, writer)	Maine Bureau of Parks and Lands	Y
Katherine Eickenberg	Chief of Planning and Acquisitions	Maine Bureau of Parks and Lands	Y
Doug Beck	Supervisor of Outdoor Recreation (LWCF program manager)	Maine Bureau of Parks and Lands	Y
Kaitlyn Bernard	Maine Program Associate	Appalachian Mountain Club	Y
Greg Sweetser	Executive Director	Ski Maine Association	Y
Kara Wooldrik	Executive Director	Portland Trails	N
Leif Dahlin	Community Services Director	City of Augusta	Y
Phil Savignano	Senior Tourism Officer	Maine Office of Tourism	N
Jessica Steele	Director of the Outdoor Adventure Center Unity College	Unity College	N
James Tasse Ph.D.	Education Director	Bicycle Coalition of Maine	N
Greg Shute	Outdoor Programs Director	The Chewonki Foundation	N
Dan Parlin	President	Topsham Trailriders ATV/Snowmobile Club	N
Al Cowperthwaite	Executive Director	North Maine Woods, Inc.	N
John Daigle	Associate Professor of Forest Recreation Management	University of Maine School Of Forest Resources	Y (phone)
Judy Sullivan	Program Director	Maine Adaptive Sports & Recreation	N

2. Review and update on progress and schedule

- Rex Turner overviewed where the process stands and what is next. Rex indicated that the major survey effort was complete with results shared via the SCORP webpage. Writing and analysis is largely complete, though there is work to pull together a first draft and fill in gaps. Issues and an implementation strategy, along with an executive summary are not yet written.

3. Review and input on framing Maine's SCORP report

- Rex Turner led a discussion on using the concept outlined in the "Framing Outdoor Recreation Issues in Maine" document shared prior to the meeting via email. Discussion revolved around whether or not this approach of focusing on addressing major community issues such as health and economic activity was a good direction or not. The group supported the overall focus shared in the document.

4. Issues and action items

- Rex Turner walked the group through a short presentation on supply/demand/trends. Group discussion explored aspects of the presentation

Key Points Noted: ME SCORP Steering Committee Discussion, 4/29/15
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- | |
|---|
| <ul style="list-style-type: none">• Proximity to outdoor recreation facilities/opportunities mentioned as a major factor to appreciate• The idea of "alleviating" social problems was discussed with "positive impact" or "helping address" identified as more appropriate language.• There was general support for the SCORP framework, especially the community aspect.• It was suggested that we better define the idea of recreation infrastructure needs to discuss the role of public and private entities.• The national park proposal for the Quimby lands east of Baxter State Park was mentioned as an interesting topic related to outdoor recreation and jobs.• Outdoor recreation's value was discussed in relation to both small town livability (quality of life) as well as scenarios where towns serve as gateways or basecamps for large, destination scale tourism and recreation.• There was questioning and discussion on Maine as a retirement destination. Rex Turner cited several published reports in which Maine's small town charm and outdoor recreation assets were listed as reasons for Maine being a retirement destination. Doug Beck added that research has shown proximity to recreation is a factor for retirees.• Health and wellness was a significant discussion topic. In particular, it was noted that perhaps the SCORP report should identify and showcase one or more exemplars where outdoor recreation infrastructure and/or programming is addressing health and wellness. Using urban and rural examples was suggested. Furthermore, a later discussion suggested profiling communities empowered by outdoor recreation (with diverse benefits).• It was suggested that perhaps a more in-depth "gap analysis" of recreation opportunities be undertaken to drill down further into specific geographic outdoor recreation needs. It was noted that |
|---|

this happens to a degree in the production of the SCORP report but that an even more robust project could be undertaken.

- Gear constraints were brought up as an issue for lower income citizens.
- There was discussion of the changing roles of groups, schools, municipal recreation programs, and parents as relating to the social structures through which outdoor recreation takes place.
- Values of “pocket parks” close to neighborhoods vs. centralized, consolidated (drive-to) outdoor recreation facilities was discussed. It was offered up that maintenance may favor the centralized facilities but that proximity increases participation.
- Ticks and tick-borne disease was listed as a major issue, both from a health and safety perspective and as an issue related to “the outdoors is scary and dangerous” messages that inhibit participation.
- The actual vs. perceived (known) resources was discussed in the context of the need for good public information.
- The importance of hunting, particularly how it values wildlife protection and leads to conservation, was mentioned.
- It was suggested that measures of physical activity, not obesity, are the preferred metric. Additionally, a study from the University of Southern Maine investigating youth obesity in rural Maine was noted.
- Gas prices were posited as a major factor affecting outdoor recreation participation.
- A suggestion was made to improve awareness in Maine of all the uses and options for the LWCF funds. This comment was suggested as a way to challenge patterns of current thinking/use.
- It was also suggested that a focus be put on repurposing older LWCF sites that have original uses abandoned as use trends move away from their original purposes.
- In response to a visitor use trend slide showing visitor use sharply down at North Maine Woods, it was noted that the private NMW properties have had notable entrance and camping fee increases and that the local economies surrounding NMW have been suffering.

Organizer/contact:

Rex Turner- Outdoor Recreation Planner
Maine Bureau of Parks and Lands
22 State House Station, Augusta, ME 04333-0022.
287-4920 rex.turner@maine.gov

Appendix B:

Maine State Comprehensive Outdoor Recreation Plan Survey 2014-2019



How Well Are We Serving Maine's Outdoor Recreation Public?

**A Report to the Maine Department of Agriculture, Conservation, and Forestry in Support
of the 2014-2019 Maine State Comprehensive Outdoor Recreation Plan (SCORP)**

Matt D. Scaccia

Dr. Sandra De Urioste-Stone

Dr. John Daigle

February 2015

This work was supported by a Land and Water Conservation Fund grant from the Maine Department of Agriculture, Conservation and Forestry; and the USDA National Institute of Food and Agriculture, McIntire-Stennis project ME041504.

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Executive Summary

In 2014, the University of Maine partnered with the Bureau of Parks and Lands (BPL) to conduct an online resident survey on outdoor recreation to inform the SCORP planning process. Data collection occurred in April 2014. The survey examined recreational preferences in terms of outdoor recreation activities, amenities, and settings; and Maine State Park use and perceptions of services offered. Participants reported their gender, age, income, education level, and place of residence. The SUS-TAS scale was used to measure resident perceptions on sustainable tourism development.

Methodology

An online questionnaire was developed considering BPL's data needs, past research, and existing models; the instrument was reviewed by BPL personnel prior to distribution. The questionnaire was sent via SurveyGizmo to three different samples of Maine residents and out-of-state recreationists. A total of 16,345 participants completed and submitted the survey, yielding a 15% response rate for the recreationist sample and 4.93% for the general public. Data were checked, cleaned and analyzed in SPSS 22; responses to open-ended questions were transferred and analyzed in NVivo 10. It was found that utilizing an online-based survey methodology was an effective method for gathering public input to inform Maine's 2014-2019 SCORP plan in a cost-effective way; more individuals were reached and responded using this approach than previously used survey modes (see Figure 1).

Results

In terms of preferred recreational settings, residents and non-Residents both found undeveloped and developed outdoor settings to be highly desirable, with water-related outdoor settings in particular being the most popular setting for both residents and non-residents. It was interesting to find that Maine State Parks were the most popular type of outdoor recreation/conservation sites visited in Maine over the past two years. As could be expected, Maine's Public Reserved Lands were highly visited by the Maine Resident/Recreationist segment. In contrast, land trust properties, local municipal parks, and Acadia National Park were highly popular sites for Maine residents over the past two years.

When analyzing types of accommodations used by the survey participants, the Maine Resident/Recreationists were most likely to use primitive overnight accommodations over the past two years, but each of the segments had a similar likelihood of spending the night at accommodations with higher levels of services and amenities. A significant finding was the fact that a very large portion of the non-resident recreationists and Maine resident-recreationists indicated that they had used a private seasonal residence while recreating in Maine over the past two years. Non-Resident/Recreationists who had used a private seasonal residence sometime over the past two years also exhibited a somewhat different profile than non-resident non-users. They

were found to be more likely to visit local municipal parks and recreate on private land, more likely to attend fairs and community events, and go motor boating and swimming.

In relation to outdoor activities, enjoying nature and viewing wildlife were among the top five most popular activities in each of the segments. It was found that both the Maine General Population and the Maine Resident Recreationists participate in outdoor recreation activities a similar amount of time over the course of a year; both as day outings and overnight outings. The majority of both the Maine General Population and the Maine Resident Recreationists pursue activities on non-motorized trails at least once a month. The majority of both the Maine General Population and the Maine Resident Recreationists pursue activities on multi-use trails at least once a few times a year. High levels of demand exist for expanding a wide variety of non-motorized trail opportunities including easy trails in natural settings, educational/natural history trails, and moderate day hikes in nature. Lower levels of demand exists for expanding a variety of motorized trails opportunities in Maine, but each of the segments most want to see community linking ATV and snowmobile trails expanded.

Travel resources used by each of the segments were highly similar with the Internet, asking family/friends, and asking local people being the most popular sources. Maine State online resources, such as the Maine Bureau of Parks and Lands site and the Maine office of Tourism websites were only used by a modest portion of respondents.

Barriers to recreating in Maine were most typically various forms of structural constraints. The most significant barriers to recreation were being too busy, not being able to get time off from work/school, and financial costs. Respondents who had reported having a low income (\$0-\$39,999/year) responded differently than higher income respondents on a number of items. Lower income respondents were more likely to report that they were constrained from participating in activities due to financial cost and were most likely to believe that the entrance fees to Maine State Parks were too expensive. The low income group expressed higher levels of interest in instructional programs and night sky events being offered or potentially offered at Maine State Parks.

Level of Education was found to be a highly influential factor that is useful for explaining potential differences between respondents. Participants with relatively low levels of education (less than high school or high school diploma/GED) were more likely to participate in driving for pleasure, fishing, hunting, motor boating, riding an ATV and snowmobiling. The low education groups were overall highly interested in trail activities but were least interested in non-motorized trails. The highly educated group was more likely to find a wider variety of outdoor settings very desirable than the other groups including backcountry trails, beaches, coastal trails, and community trails. They were also more likely to have visited Acadia National Park, Baxter State Park, local municipal parks, Maine Public Reserved Lands, Maine State Parks, land trust properties, and the White Mountain National forest at some point during the last two years than the other groups.

For comparison and analysis purposes, Table 1 summarizes key variables that describe each population profile. It briefly describes the demographic and recreational backgrounds for each of the survey segments that are discussed throughout this report.

VARIABLE	Maine General Population	Maine Resident/ Recreationists	Non-Resident/ Recreationists
Gender	Female (56.9%)	Male (63.4%)	Male (80.9%)
Age (mean)	55.4 years	50 years of age	53.4 years
Education	Have earned a four-year degree (28.7%)	Have earned a four-year degree (31.4%)	Have earned a four-year degree (33.2%)
Income.	Earn \$40,000-\$49,999 household a year (25%)	Earn over \$100,000/household/year (27.9%)	Earn over \$100,000/household/year (51.8%)
Settings (Top two)	1. Lakes/Ponds= 95% 2. Beaches= 90%	1. Lakes/Ponds= 97.6% 2. Mountains= 91.7%	1. Lakes/Ponds= 96.4% 2. Forests= 89.9%
Preferences (Top two)	1. Driving for Pleasure= 85.8% 2. Fairs/Community Events= 79.9%	1. Enjoying Nature= 79.9% 2. Fairs/Community Events= 75.7%	1. Enjoying Nature= 64.3% 2. Viewing Wildlife= 58.6%
Barriers to Outdoors (Top two)	1. Too Busy= 30.8% 2. No Time off from Work/School= 24%	1. Too Busy= 28% 2. Financial Cost= 17.4%	1. No Time off from Work/School= 32.9% 2. Too Busy= 32.6%
Reasons for Never Visiting a Maine State Parks Before (Top two)	N/A	1. Having other recreational priorities= 47% 2. Too far away= 23.6%	1. Having other recreational priorities= 52.6% 2. Lack of knowledge about Maine State Parks= 23.2%
Sources of Recreation Information (Top two)	1. Internet= 84.8% 2. Family/Friends= 76.5%	1. Internet= 80.3% 2. Family/Friends= 76.6%	1. Internet=77.9% 2. Family/Friends= 60.0%
Overnight Accommodations (Top two)	1. Hotel/Motel= 50% 2. Private Seasonal Residence= 37.3%	1. Tenting in a Campground= 47% 2. Private Seasonal Residence= 45.6%	1. Private Seasonal Residence= 44% 2. Hotel/Motel=35.8%
Frequency of Pursuing Day Outing in Maine	Weekly=28.1%	Weekly=26.6%	A Few Times a Year= 39.7%

The vast majority of both Maine Residents and Non-Residents have been to a Maine State Park at least once. Most respondents from the Maine Residents and Non-Residents populations *strongly agree* that conserving Maine lands with recreational access should be a priority for the State of Maine. Residents and Non-Residents are *highly interested* in a wide variety of educational opportunities that could be offered/are offered at Maine State Parks.

Finally, residents' attitudes toward tourism vary *greatly* depending on the area/region they live in. Residents believe, *very strongly*, that it is the responsibility of both community businesses and other improvement efforts to ensure that visitors are satisfied with their experiences visiting Maine. Residents believe, *very strongly*, that tourism requires well-coordinated planning that needs to take a long-term view. Residents mostly believe that tourism in their community does not disrupt their quality of life that their recreational resources are not overused by tourists, and that tourism does not contribute to a sense of overcrowding.

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The research team would like to acknowledge the important contributions made by the following individuals and the support they contributed throughout this study:

- Rex Turner: *Outdoor Recreation Planner*- Maine Bureau of Parks and Land. We greatly appreciate the ongoing feedback, support, and the opportunity provided for the parks, Recreation and Tourism program to engage in actionable research.
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- Bill Halteman: *Professor of Mathematics and Biostatistics*- University of Maine. We greatly appreciate for feedback provided for statistical analysis and sampling decisions.
- Scott Ramsay: *Supervisor, Off Road Vehicle Division*- Maine Bureau of Parks and Lands. We thank Scott for the feedback provided while designing the trail-related questions.
- Mark W. Anderson: *Senior Instructor in Economics and Policy*- University of Maine. We appreciate his insights during the study design and data analysis process, especially in exploring new avenues for data analysis.

Acronyms

BPL: Maine Bureau of Parks and Lands

LWCF: Land and Water Conservation Fund

NRSE: National Survey on Recreation and the Environment

SCORP: State Comprehensive Outdoor Recreation Plan SUS-

TAS: Sustainable Tourism Attitude Scale

SPSS: Statistical Package for Social Sciences

About the Authors

Matt D. Scaccia is a Graduate Research Assistant in the School of Forest Resources, University of Maine, USA. He earned a B.S. in Parks, Recreation and Tourism from the University of Maine and is progressing toward an M.S. in Forest Resources from the University of Maine. His primary research focus and academic focus is on outdoor recreation and sustainable tourism planning. Matt became involved in this study involving the 2014 Maine Outdoor Recreation Survey at its earliest stages of development. Matt is a native of the State of Maine and has previously worked with the Maine Bureau of Parks and Lands as a Ranger with the Eastern Region Public Reserved Lands.

Dr. Sandra De Urioste-Stone is Assistant Professor of Nature-based Tourism in the School of Forest Resources, University of Maine, USA. She earned a BA in ecotourism, MS in resource recreation and tourism, and PhD in natural resources with emphasis on conservation social sciences. Dr. De Urioste-Stone has done extensive work on sustainable tourism, community-based tourism, human dimensions of biodiversity conservation, and sustainable development (including adaptation to global changes, food security, and community-based public health interventions). Her work has included research projects with Maya indigenous groups. Being a Guatemala native, most of her work has been in Latin America. She has had experience working for environmental NGOs and universities in Central America. She has focused extensively on promoting knowledge to action approaches to science.

Dr. John J. Daigle is Associate Professor of Forest Recreation Management in the School of Forest Resources, University of Maine, USA. His research has explored outdoor recreation benefits, visitor experience, alternative transportation, public access to recreation on private lands, social and cultural impacts of climate change, among others. Dr. Daigle has previously worked for the National Park Service as a park ranger, and US Forest Service as research forester. Dr. Daigle also has also been highly involved with the development of Maine's State Comprehensive Outdoor Recreation Plans and has served on both the 2009-2014 and 2014-2019 Maine SCORP steering committees.

1. Introduction

1.1. Study purpose

Every five years, The Maine Bureau of Parks and Lands (BPL) is responsible for producing the State Comprehensive Outdoor Recreation Plan (SCORP) – a mandate for receiving funding from the federal Land and Water Conservation Fund (LWCF). Additionally, this plan fulfills a reporting requirement established by the Maine Legislature in 2001 (12 MSRA 1817). The plan requires that an analysis of outdoor recreation demand, supply, trends, and ultimately priorities be documented (Land and Water Conservation Fund Act of 1965, Public Law 88-578).

To assess the supply and demand for Maine's outdoor recreation resources for the 2009-2014 Maine SCORP, the Maine Bureau of Parks and Lands contracted with the USDA Forest Service to receive the *Maine and the Maine Market Region* report, which was based upon Maine and New England data derived from the National Survey on Recreation and the Environment (NSRE) (Maine SCORP, 2009). While this data is still useful for planning purposes, the addition of new survey data that investigates and documents perspectives on outdoor recreation preferences and priorities has the potential to 1) greatly increase the ability of Maine Parks and Lands and other public and private outdoor recreation managers to better understand current demand, and 2) to improve decision-making. The State had not administered a public statewide outdoor recreation survey to inform their SCORP since 1991/92 (Department of Conservation, 1994).

The survey was developed with and performed by faculty of the School of Forest Resources at the University of Maine, and has served to evaluate conventional wisdom and open up new thinking regarding what the public wants and how they can best be served. Other purposes of this study were to better understand barriers to outdoor recreation participation, observe potential changes in recreational behaviors, understand the current needs and demand for recreational trail development, determine the use and demand for Maine's State Park system, and understand the potential for sustainable tourism development in the State via exploring residents' perceptions.

1.2. Background and Relevance

In order to effectively assess outdoor recreation in the State of Maine, it is essential to understand individuals who are known recreationists as well as the general public. This survey signifies the first effort by the State of Maine to conduct a statewide outdoor recreation survey since 1991/1992 (Maine SCORP, 2003). Given that LWCF money was not distributed to States between 1996 and 1999, Maine did not update its SCORP during these years and did not conduct any statewide outdoor recreation surveys (Maine SCORP, 2003). Maine has otherwise published

a SCORP plan approximately every five years from 1966 until the present; and has typically used some form of state resident survey. A variety of methods have been used to collect these types of data in the past; this survey represents the first time the State has utilized an online-based survey. Table 2 below outlines a historical record of the State's efforts to quantify residents' trends in outdoor recreation.

Table 2. Maine Resident Recreation Survey Specifications. Adapted from Maine Department of Conservation (1994).

SURVEY	Sample Method	Number of Returns	Ages
1963 University of Maine (Orono)	Personal interview (door to door)	1,402	Unknown
1972/73 Tourism	Telephone	2,100	Unknown
1976/77 Bureau of Parks and Recreation	Telephone	1,500	14+
1977/78 New England	Telephone	215	12+
1978/79 Snowmobile	Mail	1,564	15+
1985 Fish/Hunt	Personal interview	495	16+
1986 Boating	Mail	1,222	Unknown
1988 Fishing	Mail	332	Unknown
1988 Ice Fishing	Mail	168	Unknown
1991/92 Bureau of Parks and Recreation	Mail	606	16+
2003-2008	*No resident survey conducted	-	-
2009-2014	*No resident survey conducted	-	-
2014-2019 University of Maine (Orono) Maine Outdoor Recreation Survey	Online	9,934 (State residents only)	18+

While the data collected on recreational preferences and behaviors will benefit the Maine Bureau of Parks and Lands, questions on the instrument related to sustainable tourism will have new scientific significance. Questions on sustainable tourism have attempted to re-validate the Sustainable Tourism Attitude Scale (SUS-TAS), a published psychometric instrument that has not yet been implemented on a statewide scale before (Yu, Chancellor, and Cole, 2011). These new data will be useful for planners and managers who work within the tourism and outdoor recreation industry.

1.3. Measuring Perceptions

1.3.1. User Perceptions—Barriers, Motivations, etc.

A key objective of this study was to develop a greater understanding for the types of influences that effect Maine residents and recreationists participating in outdoor activities and visiting Maine State Parks. Participation in outdoor activities is influenced by intrapersonal, interpersonal and structural constraints (Crawford et al., 1991; Burns and Graefe, 2007). Intrapersonal constraints include perceptions by the individual considering participation about lack of skills they possess, lack of knowledge or interest, physical condition, psychological states of the individual, and subjective evaluation of the appropriateness and availability of various leisure activities (Crossley et al., 2012). Interpersonal constraints include how others influence decisions to participate such as lack of companions—friends and family members to recreate with (Crawford et al., 1991). Structural constraints consist of aspects like lack of safety, family status (i.e. responsibilities for having to take care of young or old family members), lack of transportation, lack of availability of nearby programs, lack of money, or lack of time to engage in outdoor recreation (Crawford et al., 1991; Crossley et al., 2012). Recent research classifies structural constraints into four different sub-categories: social, natural, territorial, and institutional environments (Walker and Virden, 2005). Within the survey, questions were asked to target the researchers' understanding of these barriers for Maine State Parks as well as general participation in outdoor recreation.

1.3.2. SUS-TAS

As Maine plans the wise use and development of its recreational opportunities, understanding how Maine residents perceive the benefits and impacts of tourism in their local communities may be influential in planning efforts. A concise questionnaire instrument, known as the Sustainable Tourism Attitude Scale (SUS-TAS) (Yu et al, 2011) was incorporated into a section of the survey instrument to address these concerns and help to focus planning efforts throughout the state. Only full-time and seasonal Maine residents in the study population were asked to respond to these questions.

The literature on the topic of residents' perceptions of tourism impacts and development suggest that residents' perceptions are indeed highly important and must be taken seriously if a community's tourism industry is going to be successful. Perhaps the most significant reason for collecting data on residents' perceptions is that residents, more so than any other tourism stakeholder, are affected by the influence, impacts, and benefits associated with the tourism conditions that are in their area. The Sustainable Tourism Attitude Scale (SUS-TAS) is an instruments that is statistically valid and is highly adaptable (Choi & Sirakaya, 2005).

The SUS-TAS questions seek to understand resident's opinions on a wide variety of tourism related issues using a very short format (Yu et al, 2011). Each question asks respondents to rate their opinion of different matters using a 5-point attitude scale. This instrument has been tested

and shown to be statistically valid and have a high degree of reliability (Yu et al, 2011). The instrument seeks resident's opinions of tourism in the following seven categories: perceived social costs of local tourism, environmental sustainability and tourism, long term tourism planning principles, perceived economic benefit of tourism activity, community tourism economy and local business, ensuring visitors satisfaction, and maximizing community participation in tourism. This wide range of categories covers many of the essential topics that the final SCORP report is required to address; specifically the elements related to public participation, long-term planning, and economic demand.

2. Methodology

2.1. Study Objectives

The following key study objectives guided the development of this research project:

- Generate new baseline data to inform the Maine Bureau of Parks and Lands about what the recreation preferences and needs are for people who live in or visit Maine.
- Identify the factors that influence outdoor recreation participation behavior, including identification of needs, opportunities, and constraints associated with outdoor recreation in Maine.
- Determine how Maine State Parks are used and what can be done to improve the experiences and services they provide.
- Measure Maine residents' attitudes toward sustainable tourism and development.

2.2. Study Design

The tailored-design survey method was utilized (Dillman et al, 2009) to increase response level by motivating participation via careful and appealing questionnaire design, multiple invitations to participate, providing incentives for participation, among others (Dillman et al, 2009). An online-based survey format was chosen as a means for 1) reaching a larger number of potential respondents considering the resources available, and 2) to more easily maintain, organize, and analyze responses. The survey was distributed to potential participants via-email with a link provided within the email invitation to the survey. Given that online-based surveys have a variety of known limitations, added precautions were taken to ensure participants only completed the questionnaire once, and that participant-specific links were not shared with others (therefore biasing the sample).

2.3. Population, Recruitment, and Response Rate

To collect responses from a variety of respondents, three separate samples were created. selected to participate in the study:

Sample #1: This sample included individuals that had paid a recreation-related fee directly to the state of Maine including: fishing and hunting licenses, ATV/snowmobile registration fee, deer and moose permits, and Maine State Parks online camping registration, and had voluntarily provided their email address to the State of Maine. The ages of individuals in this population included individuals only 18 years and older. Given that many individuals belonged to multiple recreation categories (hunting, fishing, etc.), it was necessary to merge the provided databases together and remove duplicate email entries. The participants in this were 57% full-time residents of the State of Maine (n=9043), 3.3% seasonal residents (n=527), and 39.7% were not residents (n=6,292). The sample was also primarily male participants with 70.7% male (n=11,020) and 29.3% female (n=4,556). A total of 15,969 completed responses, and 4,908 partial responses were submitted from the participants in this sample. Only completed responses were considered for analysis. A 15% response rate was achieved with this sample.

Sample #2: The second sample included primarily citizens of the state of Maine. Individuals on this list had voluntarily provided their email to InfoUSA. The ages of individuals in this population included individuals only 18 years and older. The participants in this were 96.2% full-time residents of the State of Maine (n=204), 1.9% seasonal residents (n=4), and 1.9% were not residents (n=4). The sample was also predominantly female participants with 57.8% female (n=122) and 42.2% male (n=89); which is closely relates to the census data. A total of 214 completed responses were submitted from the participants in this sample. A 4.93% response rate was achieved with this sample.

Sample #3: Due to interest by the general public to participate in the study, a third sample was created to incorporate these views. This third sample was created to share with anyone who was interested in participating in the survey but did not belong to either of the other two sample categories. A separate link to the survey was provided to members of the Androscoggin Land Trust through a newsletter published by the organization. An article was published in the Portland Press Herald on 5/11/2014 on this study and the link to the survey was included in the article (Fleming, 2014). The participants in this sample were 94.4% full-time residents of the State of Maine (n=153), 1.9% seasonal residents (n=3), and 3.7% were not residents (n=6). This sample was primarily male participants with 64.2% male (n=104) and 35.8% female (n=58). A total of 162 completed responses were submitted from the participants in this sample.

Throughout the remainder of this report, only the results for sample #1 and sample #2 are being reported. Given that the respondents from sample #3 did not represent a clearly definable population, their responses will only be used for comparative purposes on the appendices.

The survey officially opened on April 15, 2014 and access was disabled to each of the survey links on May 19, 2014. An increase in response rates can be seen on April 22 and April 29-30 when the reminder notifications were sent out. Figure 1, Figure 2, and Figure 3 display the total cumulative number of responses collected for each of the samples over the course of data collection:

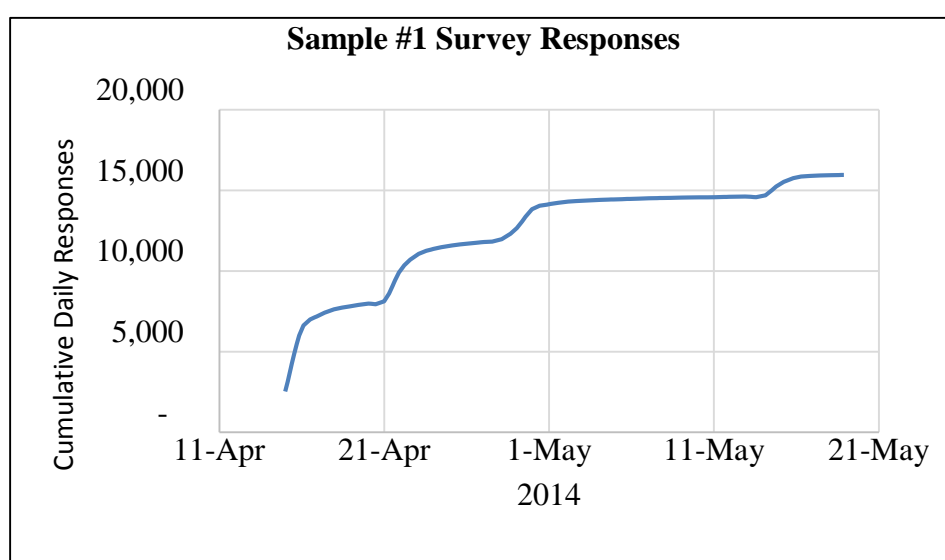


Figure 1. Cumulative Responses for Sample #1 Survey Participants

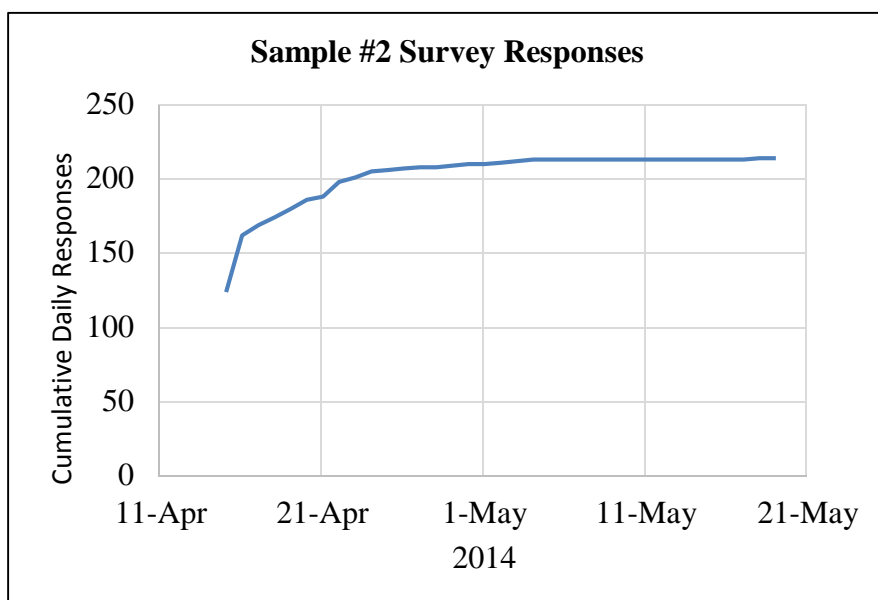


Figure 2. Cumulative Responses for Sample #2 Survey Participants

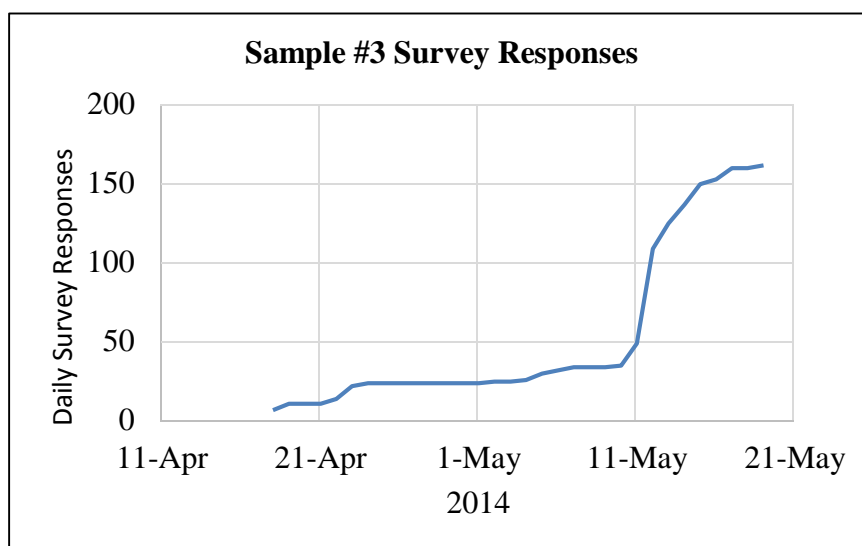


Figure 3. Cumulative Responses for Sample #3 Survey Participants

Some limitations to the online-survey mode for this study included: 1) inability to recruit participants who did not have an active email address or access to the internet; 2) recreationists and general Maine public who did not provide their email to InfoUSA, the State of Maine for registration purposes; and 3) incorrect email addresses provided.

2.4. Questionnaire Design

Questionnaire design was done in close collaboration with members of the BPL to respond to their data needs. The survey instrument was divided into four primary sections: 1) general descriptive questions on recreation behavior and preferences; 2) questions related to participants' experience and activity at Maine State Park; 3) questions on sustainable tourism; and 4) demographic background questions. Questions related to resident perceptions on sustainable tourism development from an established psychometric instrument known as the 'sustainable tourism attitude scale' (SUS-TAS) as refined by Yu, 2011. Within the survey instrument there were three questions that provided respondents the opportunity to provide "write-in" responses.

2.5. Ethical Considerations

The survey methodology, procedures and questionnaire were approved by the University of Maine's Institutional Review Board (IRB). Participants were given an informed consent notification that described what they were being asked to do in the survey, the risks they would be undertaking by participating, the benefits they might receive by participating, the procedures for maintaining their confidentiality, and the contact information of the principal investigator of the research team. It was made clear to participants that their responses would be strictly confidential and no personally identifiable information would be shared with any other parties. Email addresses provided by the State of Maine were managed solely by the research team, following strict procedures to protect privacy of participants and avoid use of these addresses beyond the purpose of the study (See Appendix B. for the signed official IRB approval).

2.6. Increasing Response Rate

In order to increase the response rates, reminder invitations for samples #1 and #2 were sent to contacts who had not previously responded to a previous survey request. Subsequent requests for participation had a noticeable impact on increasing responses for both samples #1 and #2. For both samples, a reminder notification was sent to all contacts approximately one-week after the previous invitation was sent. A total of three follow up messages were sent to contacts in sample #1 and two follow up messages were sent to sample #2. The effect of the follow up messages was much more notable for sample #1 where 49% of respondents decided to participate after they had already received at least one reminder notification (Figure 4). For Sample #2 however, only 12% of respondents decided to participate after they received at least one reminder notification (Figure 5).

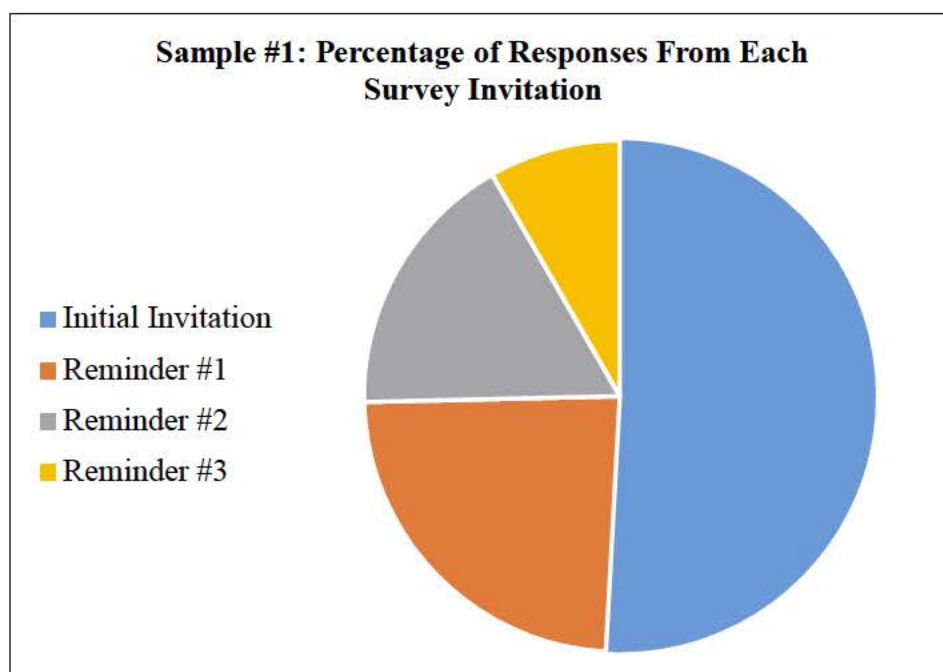


Figure 4. Relative Percentage and Number of Responses from Each Survey Invitation for Sample #1.

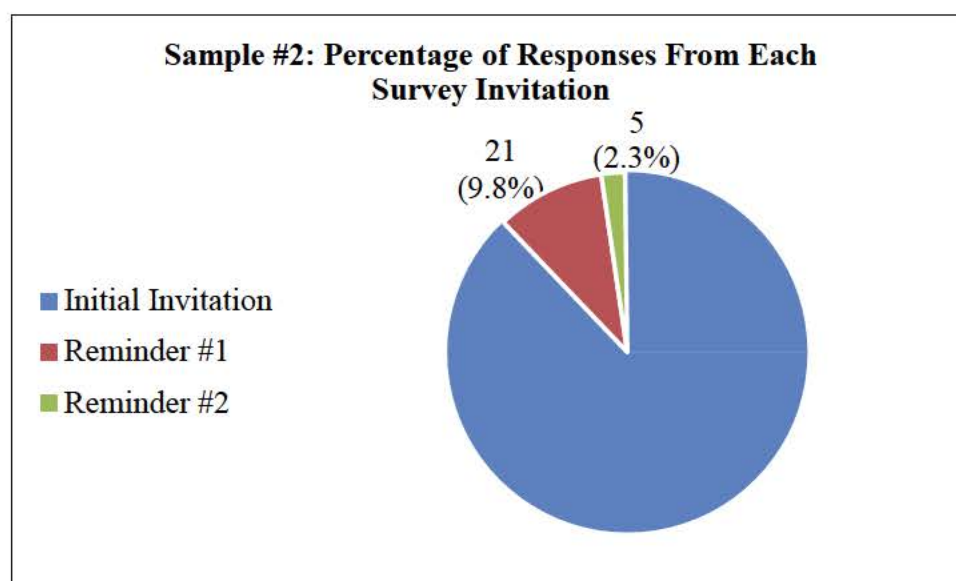


Figure 5. Relative Percentage and Number of Responses from Each Survey Invitation for Sample #2.

According to Kittleson (1997), it is essential to remind participants multiple times about an online survey in order to increase response rates. It is also common to note that if too many reminder messages are sent, participants will be less likely to participate as they reach a ‘saturation point’ where they continue to not have interest in the study after multiple reminders (Kittleson, 1997).

To increase the potential response rate, participants were given the option to voluntarily provide their email address to be entered into a raffle. Raffle items included 500 Maine State Parks passes, 5 seasonal passes, and a \$50.00 L.L. Bean gift card. This strategy was effective at increasing the response rate, but participants may have been more likely to participate in the survey and raffle if they were recreationists since the prizes were all outdoor recreation related.

2.7. Analysis

Survey responses were downloaded from SurveyGizmo into SPSS (version 22). Database was cleaned. Frequencies, means and standard deviations on activities, perceptions, preferences, and demographics were estimated.

NVivo 10, a qualitative analysis software, was used to conduct a content analysis to identify the most frequently used words that were present in respondents’ comments. Word searches were also conducted to identify patterns in the responses. It was then possible to search for specific references to particular words or phrases and compare responses to similar topics. While a substantial portion of the open-ended responses are not relevant for planning purposes, responses have been broken down into ideas and suggestions that could be useful for planning outdoor recreation in Maine.

2.8. Quality Control

2.8.1. Pre-Testing

The questionnaire was pre-tested prior to launching the official survey. Pre-testing invitations were sent to select staff at the Maine Bureau of Parks and Lands, professional colleagues of the research team, students majoring in parks, recreation and tourism, as well as relatives and acquaintances. Changes were made to the procedures and questionnaire based on results from the pre-testing efforts.

2.8.2. Response Rate

Samples #1 and #2 achieved a 15% and 4.93% response rates respectively. This significant difference in response rates may be attributed to two primary factors: recreation background of the samples and their potential motivation to participate in the survey; and the percent of spam and

undeliverable messages. The higher response rate may be due to type of population that was being contacted. Since all of the contacts in sample #1 were known to be some type of active recreationist, individuals receiving the invitation may be more interested in participating than the average Maine resident. A second contributing factor may have been that it was necessary to calculate the response rates for sample #1 and sample #2 differently.

2.9. Limitations

One limitation of this study is that the majority of study participants are known to be active participants in outdoor recreation activities to some degree. Although the study results signal that the general Maine population is highly active in outdoor recreation activities throughout the state, the response rate from the general population sample (Sample #2) used was relatively low and may be difficult to draw broad generalizations from. A second limitation of this study is that it was necessary that participants have internet access, and had provided their email address, to take the survey. Also, given the topic of the survey, more active recreationists may have been more interested in participating in the survey, thus resulting in some degree of avidity bias. It was also not possible to use any data from ‘partial’ responses because respondents did not submit their answers.

3. Results and Discussion

Throughout the results and discussion section of this report, the survey samples that were described previously will be discussed in terms of three primary survey segment of interest. These segments represent responses from survey samples #1 and #2. The results from survey sample #3 will not be discussed in this section of the report but their results will be available in the appendix section. The Maine General Population consists of only responses from sample #2 that were verified to be residents of the state of Maine. The Maine Resident-Recreationists and Non-Resident Recreationists are composed of all of the responses from sample #1 but are differentiated between respondents who are full-time residents of the State of Maine and respondents who do not live in the State of Maine.

3.1. Demographics

Demographic data was collected for all of the participants in the survey. The Maine General Population had the lowest overall total response (n=204) while the Maine Resident/Recreationists (n=9043) and the Non-Resident/Recreationists (n=6292) had a greater number of responses. There were also notable differences in the gender of the respondents from each of the three primary

survey segments. The Maine General Population segment had a somewhat higher number of female respondents (56.9%) than male respondents. According to 2013 estimates from the U.S. Census, only 51% of the Maine state population is female. The respondents from sample #1 however were more dominated by male respondents. The Maine Resident/Recreationists segment had significantly more male respondents (63.4%) while the Non-Resident/Recreationists were overwhelmingly male (80.9%). This may be because the types of activities that are associated with sample #1 (hunting, fishing, etc.) have traditionally been male dominated.

The mean ages for each of the three primary survey segments were somewhat higher than the median age for residents of the State of Maine. The Maine Census (2010) found that the median age for Maine residents is 43.5 years old. The Maine General Population survey segment had a mean age of 55.78, the Maine Resident/Recreationists had a mean age of 49.57, and the Non-Resident/Recreationists had a mean age of 53.47. While these ages are all somewhat higher than the 2010 Census, their values were similar enough to each other to make reasonable comparisons between the survey segments.

The ZIP codes for each respondent was collected in order to determine the location of their primary residence. Table 3 displays the top ten cities/towns that responded for each of the survey segments.

Table 3. Top Ten Cities/Towns Responding to the 2014 Maine Outdoor Recreation Survey by the Three Primary Survey Segments.

LIST OF CITIES	Most Populous Municipalities (2010 Census) (Count)	Maine General Population (Count)	Maine Resident/ Recreationists (Count)	Non-Resident/ Recreationists (Count)
#1 City/Town	Portland	Berwick (7)	Bangor (254)	Canada (85)
#2 City/Town	Lewiston	Harpswell (6)	Augusta (173)	Portsmouth, NH (26)
#3 City/Town	Bangor	Brunswick (5)	Portland (165)	Dover, NH (24)
#4 City/Town	South Portland	Raymond (5)	Brunswick (150)	Exeter, NH (23)
#5 City/Town	Auburn	Saco (5)	Windham (121)	Wilmington, MA (22)
#6 City/Town	Biddeford	Sanford (5)	Scarborough (119)	Merrimack, NH (19)
#7 City/Town	Sanford	Topsham (5)	Gorham (116)	Winchester, MA (18)
#8 City/Town	Brunswick	Lebanon (4)	South Portland (110)	Plymouth, MA (18)
#9 City/Town	Augusta	Scarborough (4)	Waterville (109)	Hampton, NH (17)
#10 City/Town	Scarborough	Falmouth (4)	Ellsworth (104)	Concord, MA (16)

It was found that only three cities/towns (Brunswick, Sanford, and Scarborough) from the Maine General Population segment were among the top ten most populous cities in the State of Maine. Most of the cities in that segment, however, were relatively in close proximity to the major population centers throughout the state. The Maine Resident/Recreationists segment had six cities/towns within its top ten most frequently responding cities that were among Maine's most populous municipalities. It is also important to note that there were certainly respondents from all of Maine's most populous municipalities from *both* of the Maine resident segments, but not within the top ten most frequent responses. Respondents from the Non-Resident/Recreationists segment were primarily from cities/towns that are very close to Maine (ex. Canada, New Hampshire, and Massachusetts). A large portion of the Non-Resident/Recreationists lived in states outside of New England and there were numerous respondents who lived outside of the U.S. or Canada.

Survey participants were also asked to indicate their annual household income. Figure 6 (below) details the annual income for each of the three primary survey segments.

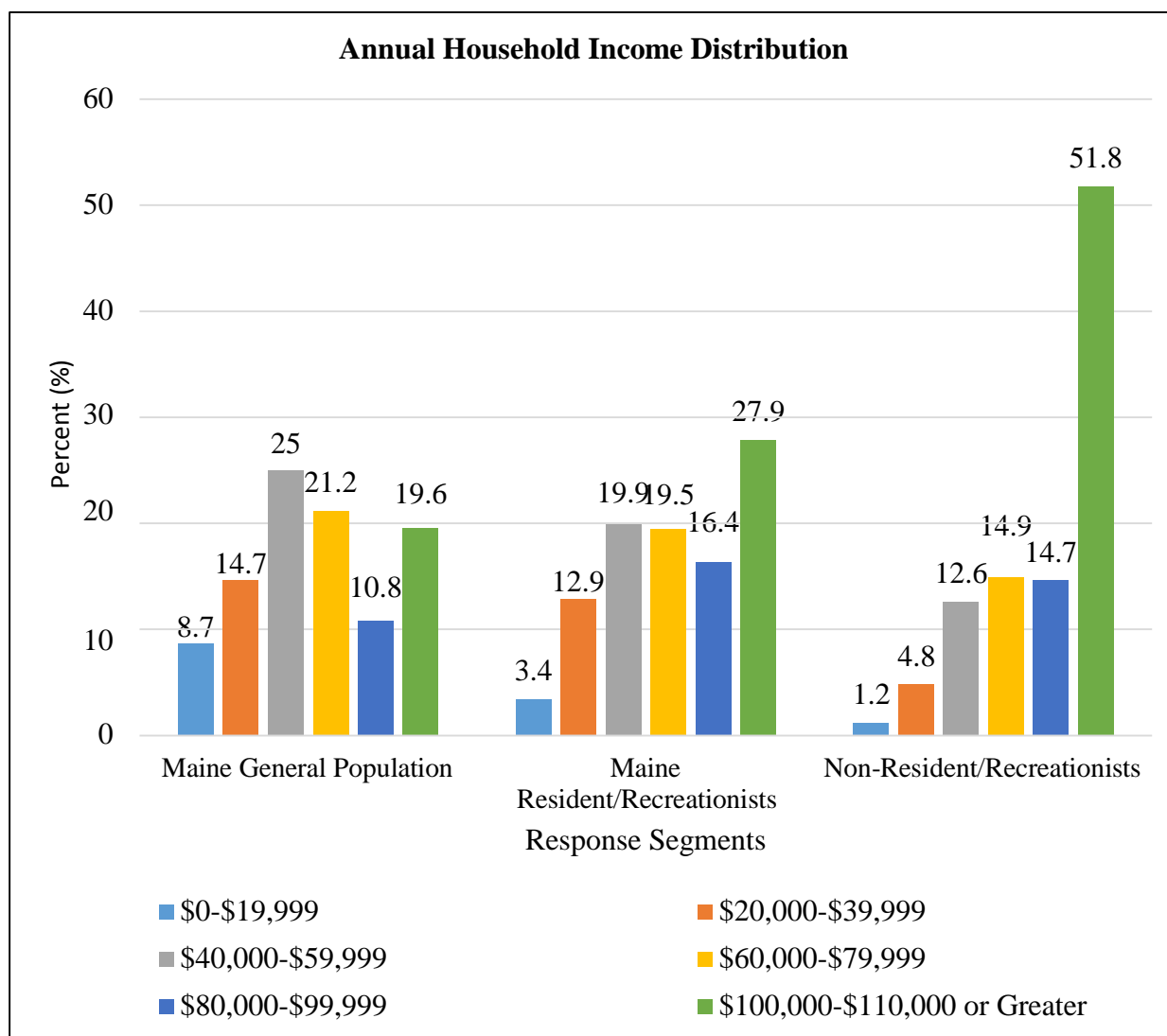


Figure 6. Annual Household Income Distributions for the Three Primary Survey Segments.

These results revealed that the Maine Resident/Recreationists and Non-Resident/Recreationists have a higher average income than the Maine General Population segment. This difference reflects similar findings related to the relation between degree and frequency of outdoor recreation participation, and wealth. The difference may also be due to the smaller sample size for the Maine General Population which may not have been large enough to capture a representative sample of income levels across Maine residents. This difference may also be attributed to the fact that major cities were underrepresented for the Maine General Population segment and may be less likely to earn higher incomes outside of those areas.

Collecting data on respondents' level of education was especially important for understanding what types of activities they have participated in and what types of travel information they use. Figure 7 (below) provides details for the level of education for all of the survey respondents.

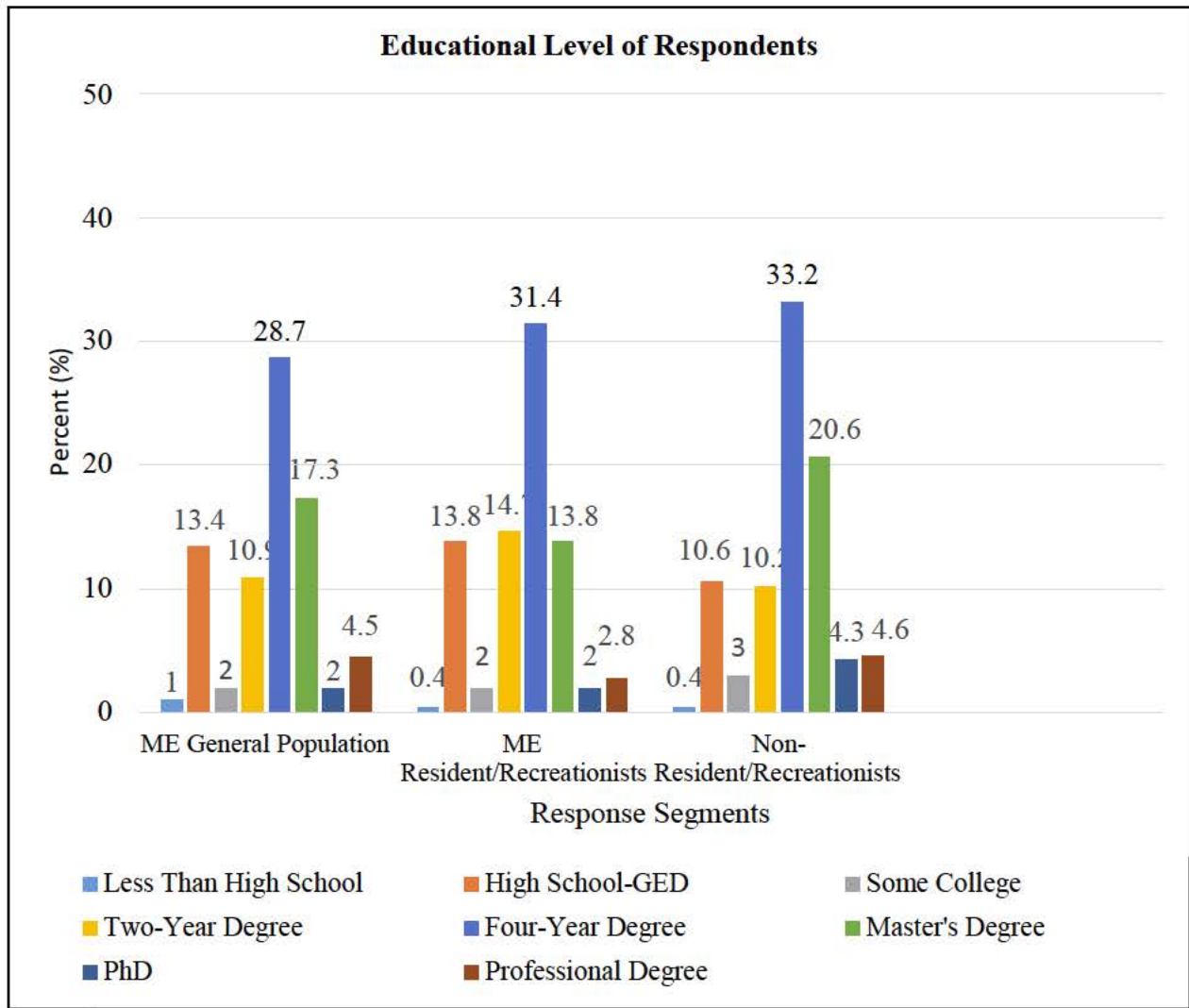


Figure 7. Relative Educational Distribution for the Three Primary Survey Segments.

Overall, the three primary survey segments all displayed relatively similar levels of education. Most frequently, respondents had a four-year college degree. The Non-Resident/Recreationists had a higher likelihood of having a master's degree.

Figure 8 (below) shows the employment status of the respondents from each of the survey segments. It was found that there were, overall, very similar employment patterns for each of the segments with most respondents indicating they were employed full time. However, it was found that the Maine General Population was more likely to be unemployed, while the Maine Resident Recreationists were least likely to be retired.

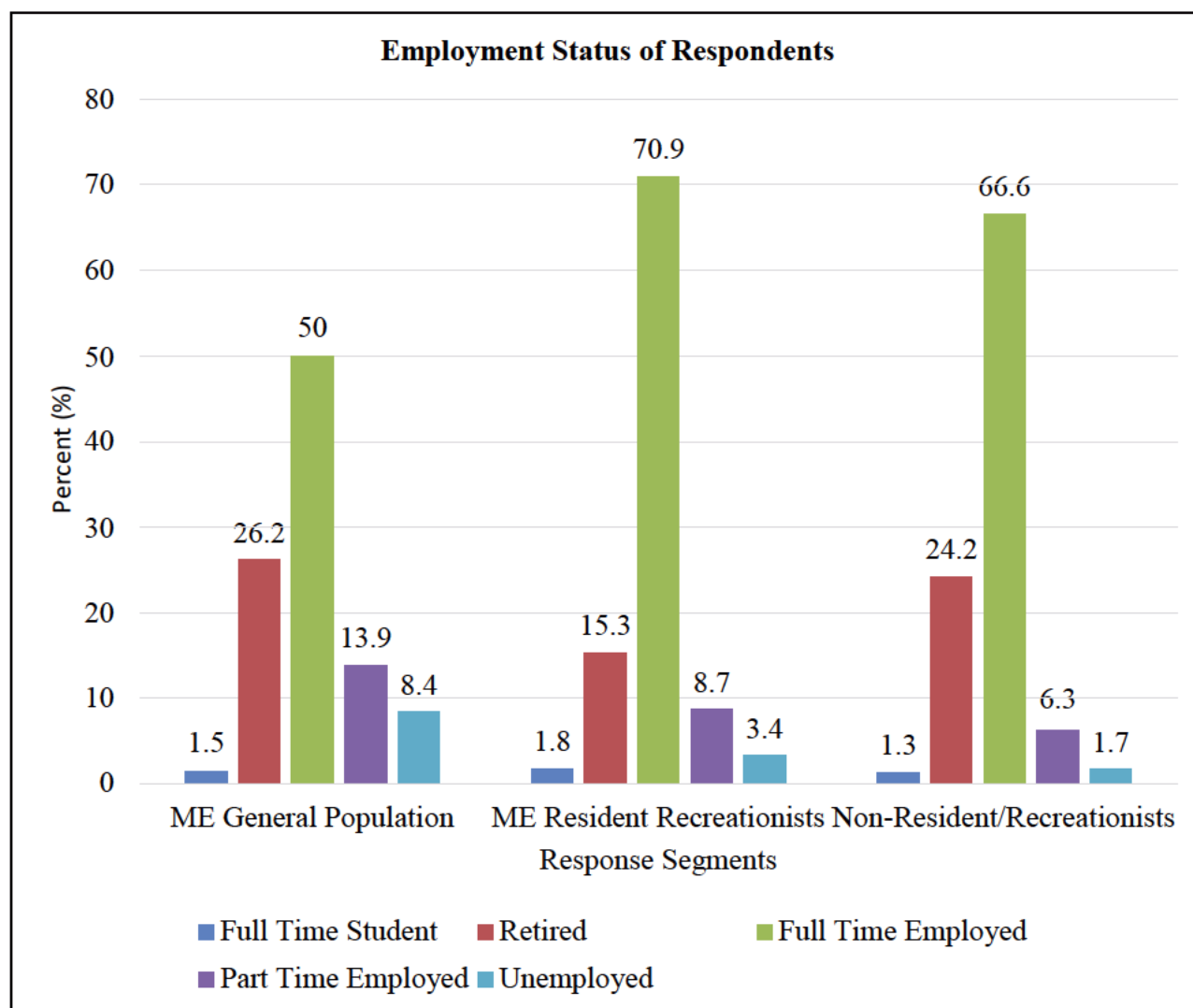


Figure 8. Employment Status Distribution for each of the Three Primary Survey Segments.

3.2. Preferred Recreational Settings

One of the primary objectives of this study was to determine what types of outdoor settings are most preferred by Maine residents and non-residents. This effort included examining a variety of settings found throughout the state as well as visitation to specific parks and other conserved Maine lands. The following tables (Table 4, desirable locations to visit.

Table 5, and Table 6) below describe respondents' attitudes regarding how favorable/not favorable specific types of areas are for undeveloped outdoor settings, developed outdoor settings, and water related outdoor settings. The results displayed in Table 4 show attitudes/preferences for a variety of undeveloped outdoor settings found throughout Maine. It was found that, overall, the

respondents had highly favorable attitudes toward undeveloped settings, with mountains being the most desirable for all three segments. The Non-Resident Recreationists highly favor mountains as an undeveloped setting and are more interested in hiking on mountains than community trails. The Maine General Population found backcountry trails somewhat less desirable than the recreationist segments, yet still rated them very highly. Similarly, the Non-Resident Recreationists found community trails less desirable than the Resident segments.

Table 4. The Relative Desirability of Undeveloped Outdoor Settings for each of the Three Primary Survey Segments.

Maine General Population					
Undeveloped Outdoor Settings	Very desirable (%)	Desirable (%)	Neutral (%)	Undesirable (%)	Very Undesirable (%)
Backcountry Trails	30.8	40.0	23.1	5.6	0.5
Community Trails	29.1	40.7	26.1	3.5	0.5
Forests	39.7	41.2	18.6	0.5	0
Mountains	46.5	41.4	11.1	1.0	0
Maine Resident-Recreationists					
Undeveloped Outdoor Settings	Very desirable (%)	Desirable (%)	Neutral (%)	Undesirable (%)	Very Undesirable (%)
Backcountry Trails	44.7	35.4	17.0	2.1	0.8
Community Trails	24.7	42.0	28.2	4.1	1.0
Forests	54.4	34.8	9.7	0.8	0.3
Mountains	63.2	28.7	7.1	0.6	0.3
Non-Resident Recreationists					
Undeveloped Outdoor Settings	Very desirable (%)	Desirable (%)	Neutral (%)	Undesirable (%)	Very Undesirable (%)
Backcountry Trails	44.2	35.1	18.0	2.3	0.4
Community Trails	11.6	31.7	48.9	6.5	1.3
Forests	56.0	33.9	9.1	0.7	0.2
Mountains	64.4	28.0	6.7	0.6	0.3

The results depicted in Table 5 (below) illustrate respondents' attitudes toward a variety of developed outdoor settings. Similar to their sentiments toward undeveloped settings, the majority

of respondents had positive attitudes toward developed settings. It is important to recognize, however, that a large portion of each segment held neutral beliefs towards these types of settings. It is clear however that most respondents from each of the samples do find cultural landmarks to be desirable locations to visit.

Table 5. The Relative Desirability of Developed Outdoor Settings for Each of the Three Primary Survey Segments.

Maine General Population					
Developed Outdoor Settings	Very desirable (%)	Desirable (%)	Neutral (%)	Undesirable (%)	Very Undesirable (%)
Cultural Landmarks	37.1	46.7	15.2	1	0
Farmlands	17.9	31.8	46.2	3.6	0.5
Playgrounds	9.2	14.9	53.3	18.5	4.1
Maine Resident-Recreationists					
Developed Outdoor Settings	Very desirable	Desirable	Neutral	Undesirable	Very Undesirable
Cultural Landmarks	31.5	45.2	20.7	2.0	0.6
Farmlands	20.2	34.2	38.8	6.0	0.8
Playgrounds	9.8	20.5	45.8	17.6	6.3
Non-Resident Recreationists					
Developed Outdoor Settings	Very desirable	Desirable	Neutral	Undesirable	Very Undesirable
Cultural Landmarks	29.0	44.8	23.4	2.2	0.6
Farmlands	13.3	27.8	49.2	8.2	1.6
Playgrounds	3.3	10.3	55.1	22.1	9.3

Table 6. The Relative Desirability of Water-Related Outdoor Settings for Each of the Three Primary Survey Segments.

Maine General Population					
Water-Related Settings	Very desirable (%)	Desirable (%)	Neutral (%)	Undesirable (%)	Very Undesirable (%)
Lakes/Ponds	57.2	37.8	5.0	0.0	0.0
Rivers	41.8	46.4	11.2	0.5	0
Beaches	55.0	35.0	9.5	0	0.5
Coastal Trails	43.7	38.7	17.1	0.5	0

Table 6 Continued...

Maine Resident-Recreationists					
Water-Related Settings	Very desirable (%)	Desirable (%)	Neutral (%)	Undesirable (%)	Very Undesirable (%)
Lakes/Ponds	76.0	21.6	2.0	0.2	0.3
Rivers	52.2	35.7	10.7	0.9	0.5
Beaches	46.9	33.2	16.9	2.3	0.7
Coastal Trails	40.6	38.2	18.6	1.9	0.7
Non-Resident Recreationists					
Water-Related Settings	Very desirable (%)	Desirable (%)	Neutral (%)	Undesirable (%)	Very Undesirable (%)
Lakes/Ponds	75.0	21.4	3.2	0.1	0.2
Rivers	53.8	34.7	10.3	0.9	0.3
Beaches	32.7	36.0	26.5	3.7	1.2
Coastal Trails	36.4	37.8	22.8	2.3	0.7

Water-related settings proved to be the overall most popular type of outdoor setting for each of the survey segments. Water settings provide opportunities for a wide variety of recreational activities that were also favored highly by respondents (see Section 3.3). Also, most types of water-related settings can be relatively accessible for enjoyment which may also contribute to their popularity. Given that a large portion of the Resident and Non-Resident Recreationist Samples had purchased fishing licenses, this may account for why they rated lakes/ponds to be ‘highly desirable’ more frequently than the Maine General Population.

Since a variety of outdoor recreation opportunities found throughout the State are available for public access over an assortment of different ownership types, it was necessary to develop an understanding of the types of areas that respondents had visited over the past two years. Table 7 details the proportion of respondents who had visited the variety of outdoor recreation/conservation sites found throughout Maine.

Table 7. Visitation to Major Outdoor Recreation/Conservation Sites over the Past Two Years by the Three Primary Survey Segments.

LOCATION	Maine General Pop. (%)	Maine Resident/ Recreationists (%)	Non-Resident/ Recreationists (%)
Acadia National Park	61.7	58.8	42.8
Baxter State Park	29.9	38.9	26.7
Farms/Agricultural Sites	48.5	49.6	21.6

Table 7 Continued...

LOCATION	Maine General Pop. (%)	Maine Resident/ Recreationists (%)	Non-Resident/ Recreationists (%)
Local Municipal Parks	78.9	75.0	36.2
Maine Public Res. Lands	29.4	46.5	25.1
Maine State Parks	77.0	78.8	55.5
Priv. Land with Rec. Access	53.4	69.8	53.5
Land Trust Properties	52.0	50.7	28.6
U.S. Fish & Wildlife Ref.	33.8	42.1	28.7
White Mt. National Forest	41.7	39.5	34.4

Interestingly, respondents from each of the segments were more likely to have visited Maine State Parks than any other type of land ownership with public access found in the State. This shows that Maine State Parks appear to be highly accessible and are very frequently used by both residents and non-residents, including the Maine general public segment. While relatively fewer Non-Resident/Recreationists visited local municipal parks, both the Maine Resident/Recreationists and the Maine General Population were nearly as likely to have visited these areas as Maine State Parks. Land trust properties and Acadia National Park were also visited by a large portion of each of the segments. Visitation levels to certain types of sites may be best understood by the types of activities most favored. It was found, for example, that the Maine Resident/Recreationists were the segment most likely to go camping and be active in other activities that are base in more backcountry or less developed settings. This helps to explain why the Maine Resident/Recreationists were significantly more likely to visit areas such as Baxter State Park or Maine Public Reserved Lands than respondents from the other segments. It is also striking to notice that 46.5% of Maine Resident/Recreationists had visited Maine Public Reserved Lands and that a similar portion of Maine Residents had visited farms/agricultural sites over the past two-years.

3.3. Preferred Recreational Activities

Perhaps one of the most essential functions of this study was to assess the types of outdoor activities that respondents participate in. Participants were asked to select all of the outdoor recreation activities they had participated in over the past two-years from a comprehensive list of 32 options. The Maine Resident/Recreationist segment was found to be more active in 26 out of 32 possible options, but in many cases, by a very small margin. A full description of how much each segment participated in every activity may be found in the appendix of this report. Table 8 highlights the top five most popular recreational activities for each of the segments.

Table 8. The Top Five Most Popular Maine Recreational Activities (out of 32 Total Options) for the Three Primary Survey Segments over the Past Two Years (2012-2014)

MOST POPULAR RECREATION ACTIVITIES	Maine General Population (%)	Maine Resident/ Recreationists (%)	Non- Resident Recreationists (%)
#1 Most Popular	Driving for Pleasure (85.8)	Enjoying Nature (79.9)	Enjoying Nature (64.3)
#2 Most Popular	Fairs/Community Events (79.9)	Fairs/Community Events (75.7)	Viewing Wildlife (58.6)
#3 Most Popular	Enjoying Nature (78.9)	Viewing Wildlife ((74.2)	Driving for Pleasure (56.7)
#4 Most Popular	Swimming (69.1)	Swimming (73.9)	Fishing on Open Water (56.2)
#5 Most Popular	Viewing Wildlife (68.6)	Fishing on Open Water (73.3)	Hiking (52.2)

Generally, each of the three segments had participated in similar activities. Enjoying nature and viewing wildlife were among the top five most popular activities in each of the segments. The Maine General Population and the Maine Resident/Recreationists had been particularly active both in swimming and attending fairs/community events. Driving for pleasure was the most popular activity pursued by the Maine General Population, but it was not among the top five for the other segments. Driving for pleasure is certainly an activity that requires little specialty and is accessible to most respondents. It appears, however, that the recreationist segments are more likely to engage in more active (as opposed to passive) forms of recreation. Fishing on open water was highly popular among the recreationist segments which is also likely driven by the condition that many of the recreationists had purchased fishing licenses from the State of Maine. A most unique finding from this examination was that a majority of *Non-Resident/Recreationists* (52.2%) had been hiking in Maine at least once over the past two years. This shows that an abundance of hiking opportunities is a factor that serves to attract people to visit Maine from out of state.

Since participants from the two recreationist samples were invited to participate in the survey based on their previous experience with various activities (hunting, fishing, camping, ATV, and snowmobiling) it was expected that they would have more likely participated in these activities than the Maine General Population segment. Figure 9 (below) shows exactly *how much more* they participated in these specific types of activities.

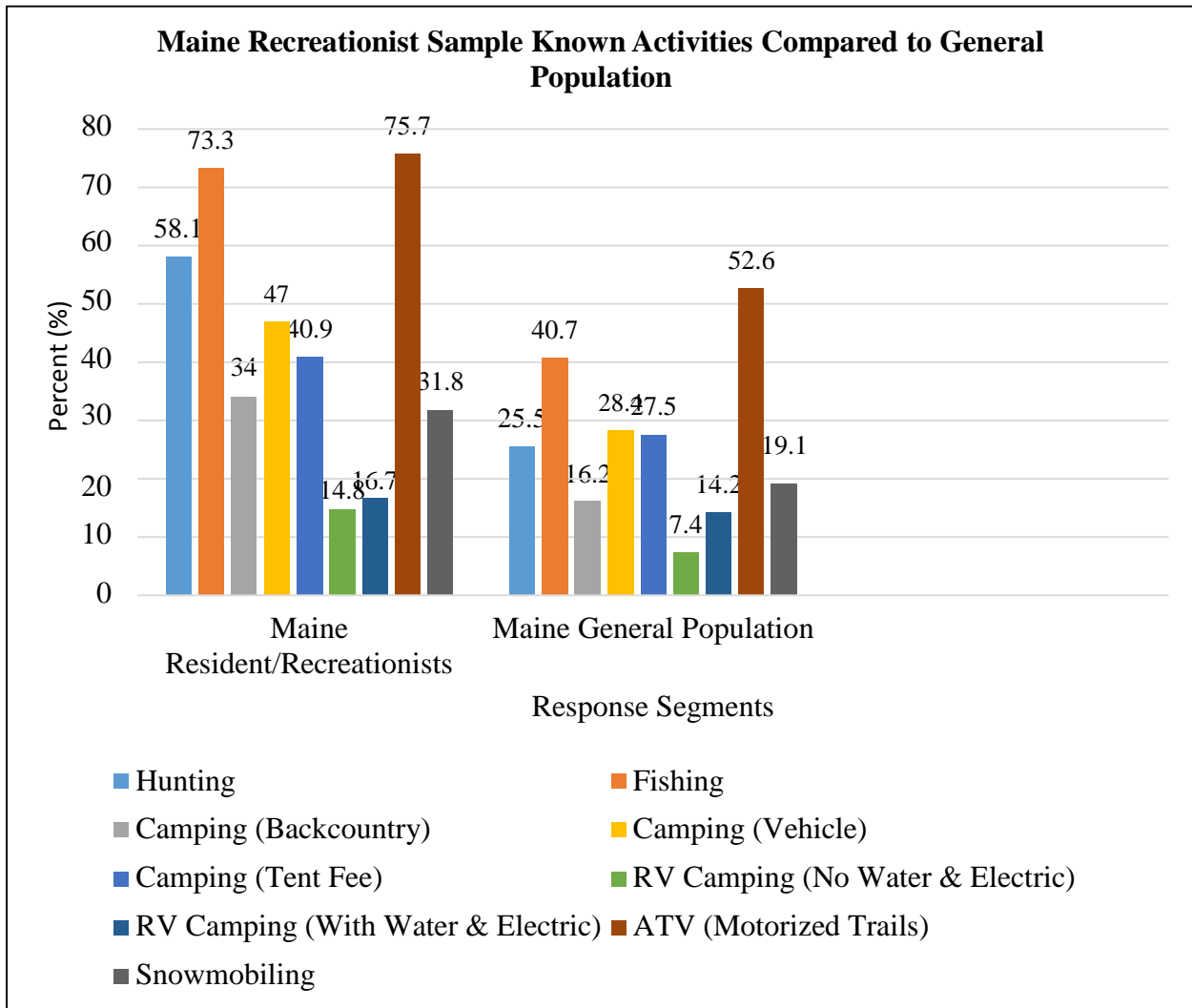


Figure 9. Maine Resident/Recreationist Known Activities as Compared to the Sampled Maine General Population Segment.

Clearly, the Maine Resident/Recreationists were substantially more active than the Maine General Population in each of the activities described in Figure 9. It is, by this point, important to recognize that the Maine Resident/Recreationists are primarily comprised of sportsmen/women. For example, the great majority of Maine Resident/Recreationists had been fishing while only a substantial minority of the Maine General Population had participated.

It was understood that certain activities such as hunting, and fishing Resident/Recreationists would probably be more active in than the General Population, it was not clear at all if/what activities the Maine General Population would be more active in than the Resident/Recreationists.

It was understood that the Maine Resident/Recreationists would probably be more likely to participate in certain activities, such as hunting and fishing, than the Maine General Population segment due to the known characteristics of the sample. It was found, however, that there were

certain activities that the Maine General Population were more likely to participate in. Figure 10 illustrates a set of seven activities the Maine General Population were more likely to engage in.

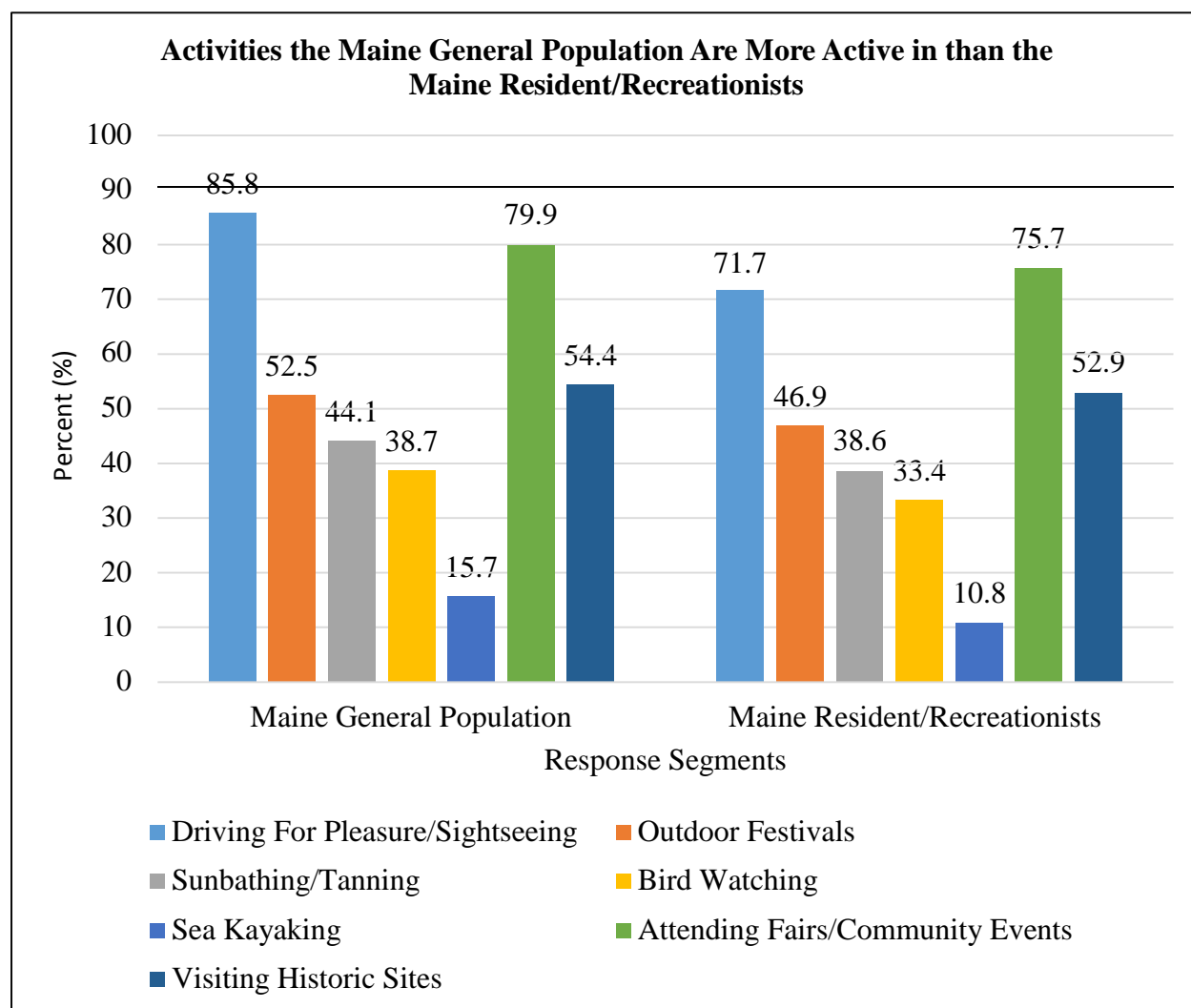


Figure 10. The Seven Activities that the Maine General Population Segment are more active in Than the Maine Resident/Recreationists Segment.

It was found that the Maine General Population was more active in only 7/32 activities than the Maine Resident/recreationists. Perhaps, not surprisingly, these particular activities have a relatively broad appeal and are relatively easy for most people to participate in. These activities, for the most part, also do not require a high degree of specialization or financial investment. It may also be the case that the Maine Resident/Recreationists would rather participate in the activities that define them as a sample (hunting, fishing, etc.) than spend their time participating in activities that are not closely related to what they favor doing.

3.4. Participation

In order to gauge how much *more* active the Maine Resident/Recreationists were than the Maine General Population, respondents were asked how frequently they participated in any form of outdoor recreation activity. Figure 11 illustrates how much time each segment had devoted to recreation over the past two years.

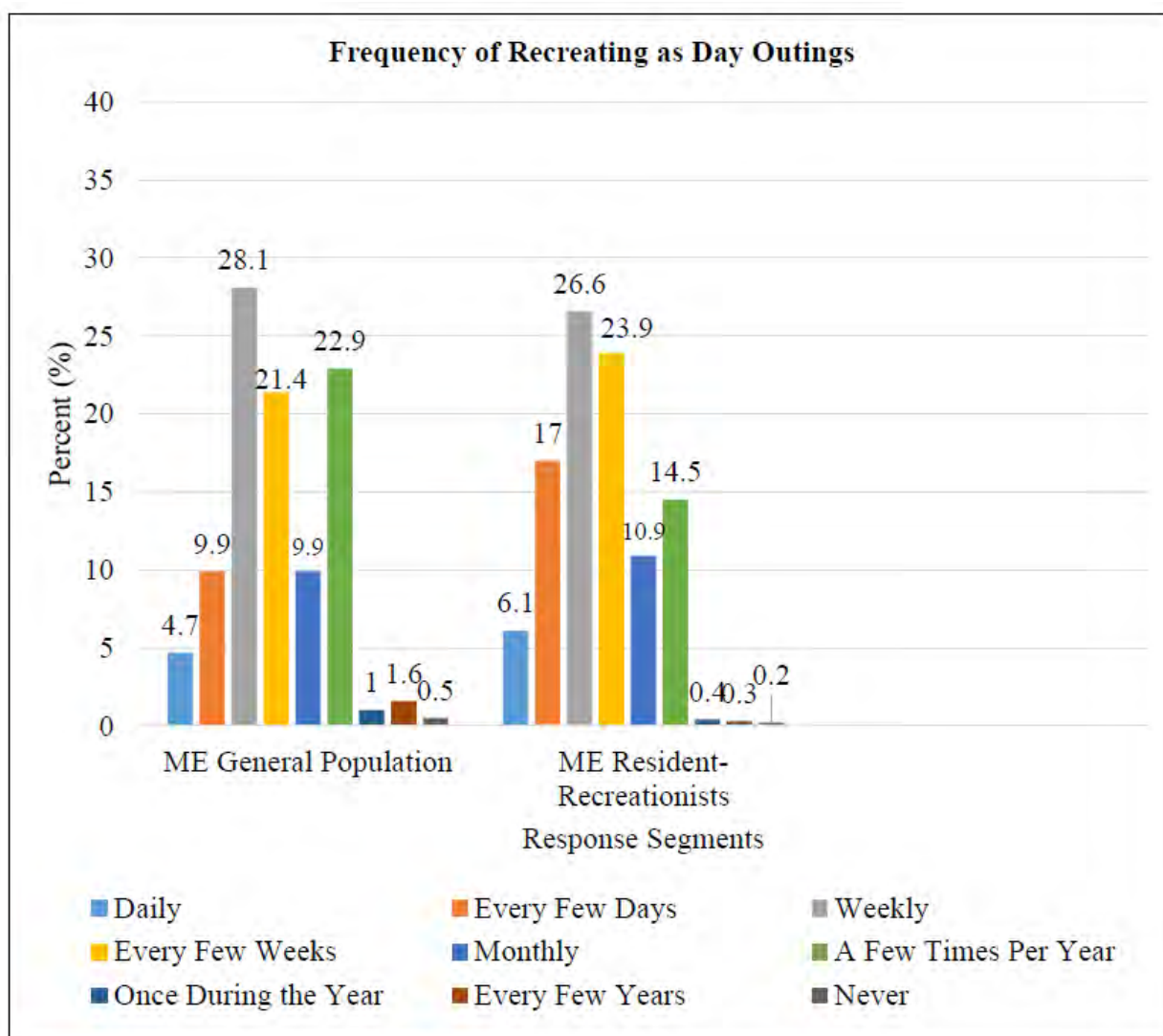


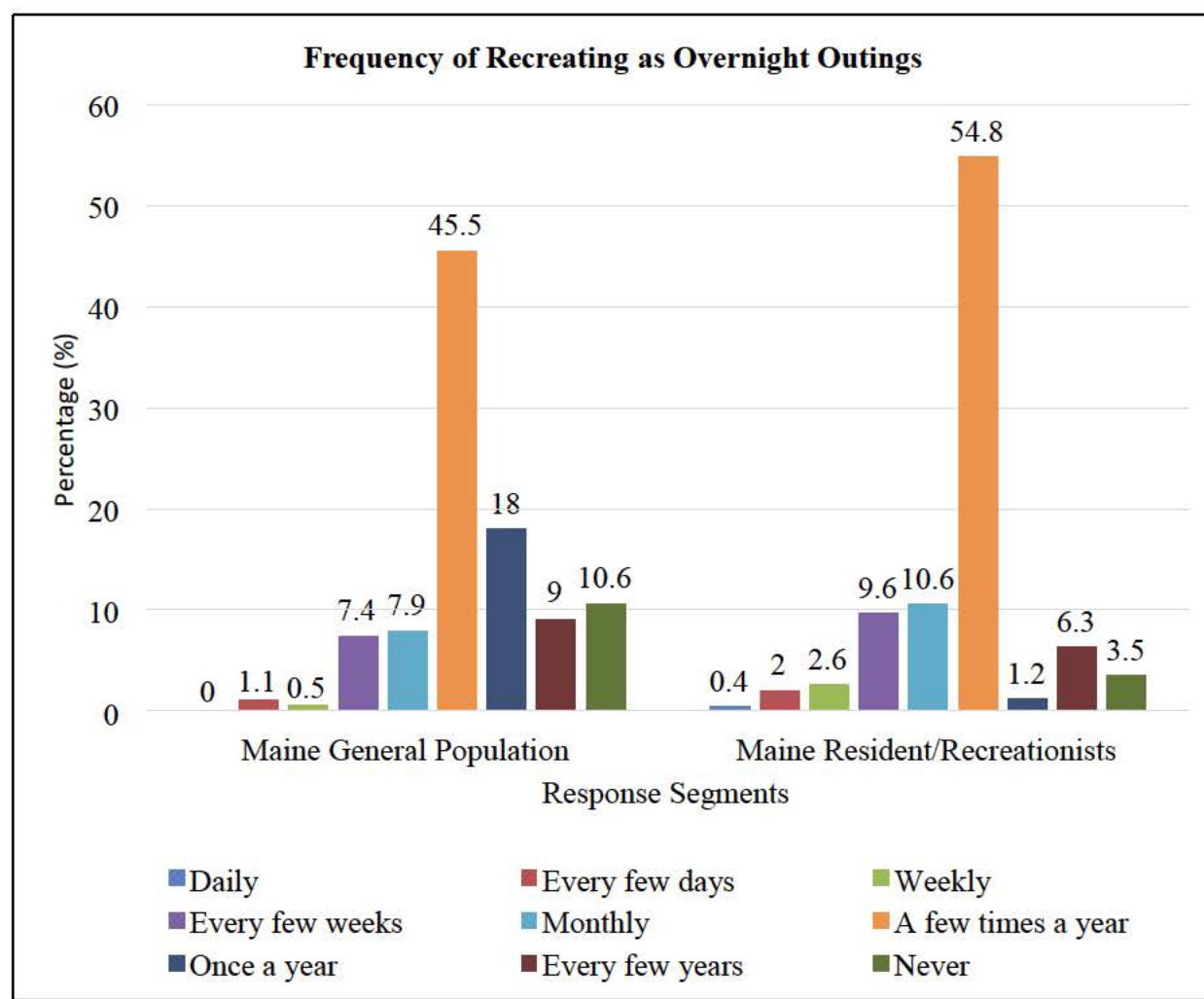
Figure 11. The Relative Frequency for Participating in Outdoor Recreation Activities in Maine over the Past Two Years (2012-2014).

Relatively few individuals from either sample participate in outdoor recreation activities once during the year or less and, overall, the samples both recreate a *similar* amount of time. It was found, however, that the Maine Resident/Recreationists do recreate somewhat more often than the Maine General Population. While 17% of the Maine Resident/Recreationists recreate every few days, only 9.9% of the Maine General Population engages in some form of outdoor recreation activity. The majority of both samples recreate at least every few weeks. This shows that the Maine

General Population is still *active* outdoor recreationists, but they are more likely to participate in a more narrow set of outdoor activities and somewhat less often than the Maine Resident/Recreationists.

As measured similarly to day outings, respondents were asked about how often they pursue some type of overnight outdoor recreation outing in Maine. Figure 12 illustrates the frequency respondents recreate overnight ranging from on a daily/nightly basis to never.

Figure 12. The Relative Frequency for Participating in Outdoor Recreation Activities as Overnight Outings in Maine over the Past Two Years (2012-2014).



Results for overnight participation were relatively similar for both response segments. A key difference found was that the Maine General Population was much more likely (18%) to pursue outdoor recreation as overnight outings only once during the year than the Maine Resident/Recreationists (1.2%). It appears that with this difference, the Maine Resident Recreationists pursued overnight outings more frequently as a few times per year (54.8%).

Respondents from both samples were highly likely to have participated in at least a few times a year or more.

Respondents were also asked about the Maine County that they most often pursued outdoor recreation most often and second most often. When compared to respondents' location of residence, residents of the state of Maine typically recreated most frequently in the county that they live in. A similar result was found for the county that respondents reported visiting second most often, but with some relevant differences. An important finding was that a large majority of all respondents visited counties with coastal access (York, Cumberland, etc.) second most often if they did not already live in a county on the coast. This finding emphasizes the fact that coastal recreation is highly popular among Maine residents and that they are willing to travel from inland counties to enjoy those experiences. It was found, reasonably, that coastal recreational resources (coastal trails, beaches, etc.) were rated more favorably by those who live closer to them.

When considering the types and level of participation of respondents, it was relevant to examine differences in general participation across seasons as Maine's outdoor industry is highly seasonal. Table 9 describes the amount of time that respondents from the Maine Resident/Recreationists engage in outdoor activities over the course of a year.

Table 9. The Relative Frequency of Participating in Outdoor Activities by Season for the Maine Resident/Recreationists Segment

SEASONAL FREQUENCY	Spring (%)	Summer (%)	Autumn (%)	Winter (%)
Daily	8.9	22.2	17.9	4.9
Every Few Days	24.2	30.4	30.0	17.7
Weekly	27.5	27.9	27.7	26.3
Every Few Weeks	18.2	10.1	12.6	19.8
Monthly	7.5	3.7	4.2	7.7
A Few Times/Year	10.0	4.9	5.8	14.8
Once a Year	2.2	0.5	1.1	3.4
Every Few Years	1.0	0.2	0.3	2.5
Never	0.6	0.1	0.2	2.9

Not surprisingly, respondents were much more likely to recreate outside a daily basis or every few days during the non-winter months. It was however revealing that participation was highly similar

for all seasons on a weekly basis or less. This shows that these respondents do remain relatively active during Maine's winter months. When compared to the Maine General Population, these respondents did participate somewhat more frequently. When compared to the Non-Resident Recreationists, these respondents participated much more frequently for all seasons. This is of course due to the fact that the Non-Resident/Recreationists visit Maine much less than residents.

3.5. Barriers to Participation

When examining the recreational constraints experienced by respondents, specific barriers may be categorized into three categories: intrapersonal, interpersonal, and structural. The responses to the questions on barriers for all of the survey samples are detailed in Table 10.

Table 10. Reported Levels for Factors Limiting Participants' Pursuit of Outdoor Recreation Activities over the past Two Years to a 'Large' or 'Very Large' Extent by the Three Primary Survey Segments (2012-2014).

RECREATIONAL BARRIERS	Maine General Population (%)	Maine Resident/Recreationists (%)	Non-Resident/Recreationists (%)
Intrapersonal Constraints			
Lack of Skills	4.7	2.1	1.2
Lack of Knowledge	4.7	2.7	2.1
Lack of Interest	4.1	2.0	1.9
Physical Difficulty	11.7	4.7	3.1
Interpersonal Constraints			
Not Having Companions	10.3	6.2	4.5
Structural Constraints			
Perceived Danger/Risk	4.7	1.8	1.1
Family Status	12.4	13.3	13.2
Lack of Transportation	1.5	1.3	1.5
Difficulty of Access	7.7	7.0	8.0
Financial Cost	27	17.4	14.4
Too Busy	30.8	28	32.6
No Time Off From Work/School	24.1	25	32.9
The Weather	12.3	11.8	5.5

Overall, the structural constraints that were measured posed the most significant barriers for respondents. Concerns over financial cost, being too busy, and being unable to get time off from work/school were the most dominant barriers. Concerns over family status also posed certain

limitations for a modest number of respondents. Concerns over lack of transportation and perceived danger/risk were essentially nonmaterial. It was however noted by several respondents who provided open comments that ticks and Lyme disease were especially worrisome and limited their pursuit of recreational activities. It is likely that if the issue of ticks/Lyme disease was asked directly in this section, based on the frequency of open ended responses, many people would have indicated that this limits their recreational activity to some degree. One particular open ended comment revealed the level of concern about this: “I used to enjoy hiking and exploring the woods and farmland in Maine prior to contracting Lyme disease 2 times. The State of Maine needs to take steps to provide signage warnings of this disease at trailheads, etc. I now limit my outdoor activities to water activities or paved/groomed walkways. It is unfortunate” (Female, age 50, Sanford, ME). Concerns about the weather limited relatively few Maine residents and limited even fewer non-residents. Since many of the Non-Resident Recreationists probably have to plan their visits to Maine well in advance, they visit with the understanding that the weather may not align with what they may have hoped for.

Intrapersonal and interpersonal constraints play a role in some respondents’ participation, but none of them at a level of high concern. Limits due to lack of skills, knowledge, or interest are essentially non-existent which indicates that these individuals are personally motivated to engage in activities and believe that they are adequately prepared to pursue activities of interest to them. The greatest intrapersonal constraint for each of the segments was concerns regarding physical difficulty with the Maine General Population being most limited by this (11.7%). This slightly higher limitation may also be a contributor to not recreating as frequently as the Maine Resident/Recreationists (See previous section on participation). It is important however to consider the needs of individuals with physical disabilities when planning for outdoor recreation and confirming that it is not a *specific* form of physical constraint that is limiting the majority of those with physical disabilities. For interpersonal constraints; concerns about not having companions to recreate with was not a large barrier for many respondents. It was found that the Maine General Population was much more likely than the other segments to experience this concern. This may be due to the condition that, by definition, the recreationist samples are more active in recreational activities and have more likely developed connections with others involved in the same activity. Also, since a large portion of the individuals from the recreationist samples are hunters and fishers, they may not be as concerned about not having companions because those types of pursuits are often solitary activities.

3.6. Preferred Services

Survey participants were asked about the variety of overnight accommodations that they have used in Maine well pursuing some type of outdoor activity. This question was designed to examine a full spectrum of accommodation opportunities ranging from most primitive (tent camping and backcountry) to most highly developed (luxury resort/hotel). Table 11 (below) illustrates the responses to this particular topic.

Table 11. Types of Overnight Accommodations Used by the Three Primary Survey Segments over the Past Two Years (2012-2014).

ACCOMMODATIONS	Maine General Population (%)	Maine Resident/ Recreationists (%)	Non-Resident/ Recreationists (%)
Tent Camping in Backcountry	16.2	34.0	18.4
Tenting in Campground	28.4	47	27.8
Tenting a Camping Area W/Fee	27.5	40.9	24.7
RV Camping, No Water or Electric.	7.4	14.8	8.4
RV Camping, With Water and Electric.	14.2	16.7	10.5
Cabin or Yurt	27.5	32.9	26.4
Maine Sporting Camp/Lodge	10.3	18.9	22.2
Private Seasonal Residence	37.3	45.6	44.0
Bed & Breakfast	21.6	14.1	12.9
Hotel/Motel	50.0	44.9	35.8
Luxury Resort/Hotel	5.4	5.8	4.4
Other	6.9	3.7	7.0

It appears that the Maine Resident/Recreationists were significantly more likely than the other segments to have used some form of primitive/minimalist accommodations over the past two years. It is relevant to note that a significant portion of the Maine resident segments have used a hotel/motel while recreating in their own state. Perhaps the most striking finding for this topic was the proportion of the Non-Resident/Recreationists who had used some type of private seasonal residence as an overnight accommodation while recreating in Maine over the past two years. This provides some compelling evidence that a large portion of the Non-Resident/Recreationists segment have very close ties to the state of Maine.

Understanding the types of recreation/travel information resources was important to help determine which channels of communication are most relevant/accessible for disseminating information. Table 12 (below) highlights the top 12 most typically used travel research resources used by each of the survey segments.

Table 12. The Top Twelve Most Typically used Travel Research Resources Used by the Three Primary Survey Segments.

SOURCES OF TRAVEL INFORMATION	Maine General Population (%)	Maine Resident/ Recreationists (%)	Non-Resident/ Recreationists (%)
#1 Source	Internet (84.8)	Internet (80.3)	Internet (77.9)
#2 Source	Family/Friends (76.5)	Family/Friends (76.6)	Family/Friends (60.0)
#3 Source	Asking Locals (54.4)	ME Atlas/Gazetteer (57.8)	Asking Locals (43.9)
#4 Source	Newspaper Articles (48.0)	Asking Locals (54.7)	Magazine Articles (36.4)
#5 Source	Magazine Articles (46.6)	Way finding/Exploring (43.5)	ME Atlas/Gazetteer (35.3)
#6 Source	ME Atlas/Gazetteer (43.6)	Magazine Articles (38.3)	Way finding/Exploring. (29.2)
#7 Source	Way finding/Exploring (37.7)	BPL Website (36.6)	BPL Website (28.9)
#8 Source	Road Signs (32.8)	Newspaper Articles (35.7)	Maine Guidebooks (28.0)
#9 Source	BPL Website (26.5)	Maine Guidebooks (23.7)	Maine Office of Tourism Website (22.4)
#10 Source	Highway Info Centers (24.0)	Road Signs (23.6)	Highway Info Centers (19.4)
#11 Source	Maine Guidebooks (22.5)	Public Recreation Staff (15.1)	Public Recreation Staff (16.6)
#12 Source	Maine Office Tourism Site (21.1)	Highway Info Centers (14.8)	Newspaper Articles (16.5)

By far, the most important travel resource for the majority of respondents was the internet. Also, asking friends/family was found to be a highly used resource by most everyone. Noticing that the Non-Resident/Recreationists ask their friends/family about recreation/travel in Maine further demonstrates that any of them undoubtedly have a strong connection to the state. It is also of interest to consider how many people from each segment actively ask local residents about traveling in their area. It seems that printed resources are important to each of the segments, but that different segments favor certain types of formats. The Maine General Population was most likely to use newspaper articles (48.0%) and magazine articles (46.6%), the Maine Resident Recreationists were most likely to use Maine's Delorme Atlas/Gazetteer (57.8%), and the Non-

Resident Recreationists were most likely to use magazine articles as a print resource (36.4%). It is possible that the Maine General Population was most likely to use the newspaper as a resource because they are so widely available and is a primary source for many other types of general information. The BPL website is one of the top nine most used sources of information for the three segments. Since the internet is clearly the most important travel resource used by the greatest diversity of respondents, this shows that the Bureau of Parks and Lands website is likely one of the best channels for disseminating specific recreation related information for reaching the widest audience.

3.7. Trail Activities and Desired Expansion

A unique topic of interest that was covered in the survey was a set of questions devoted to looking at trails in Maine. Respondents were asked about how often they engage in trail activities and use trail resources and how much they felt that certain types of trail resources need to be expanded in Maine. The questions were categorized into three primary trail types: non-motorized trails, motorized trails, and multi-use trails. Non-motorized trails were defined as trails that only support opportunities for hiking, biking, cross country skiing, and other similar activities. Motorized trails were defined as trails that support opportunities for, mainly, ATV, snowmobile, and other motorized uses. Multi-use trails were defined as resources such as shared-use rail trails, trails that support opportunities for motorized uses simultaneously with walking, biking, cross country skiing, and other non-motorized uses.

Throughout this section, the trail use frequency for the Maine Resident/Recreationists will be highlighted; results for the other segments are available in the appendix of this report. Essentially, there were relatively few differences observed between the Maine Resident/Recreationists and the Maine General Population. It was found, expectedly, that a greater portion of the Maine General Population never uses non-motorized trails or multi-use trails. Similarly, the Non-Resident/Recreationists were found to use all of the various trail categories less frequently than state residents. The following Figures (13, 14, and 15) illustrate how much time the Maine Resident/Recreationists spend participating in trail related activities.

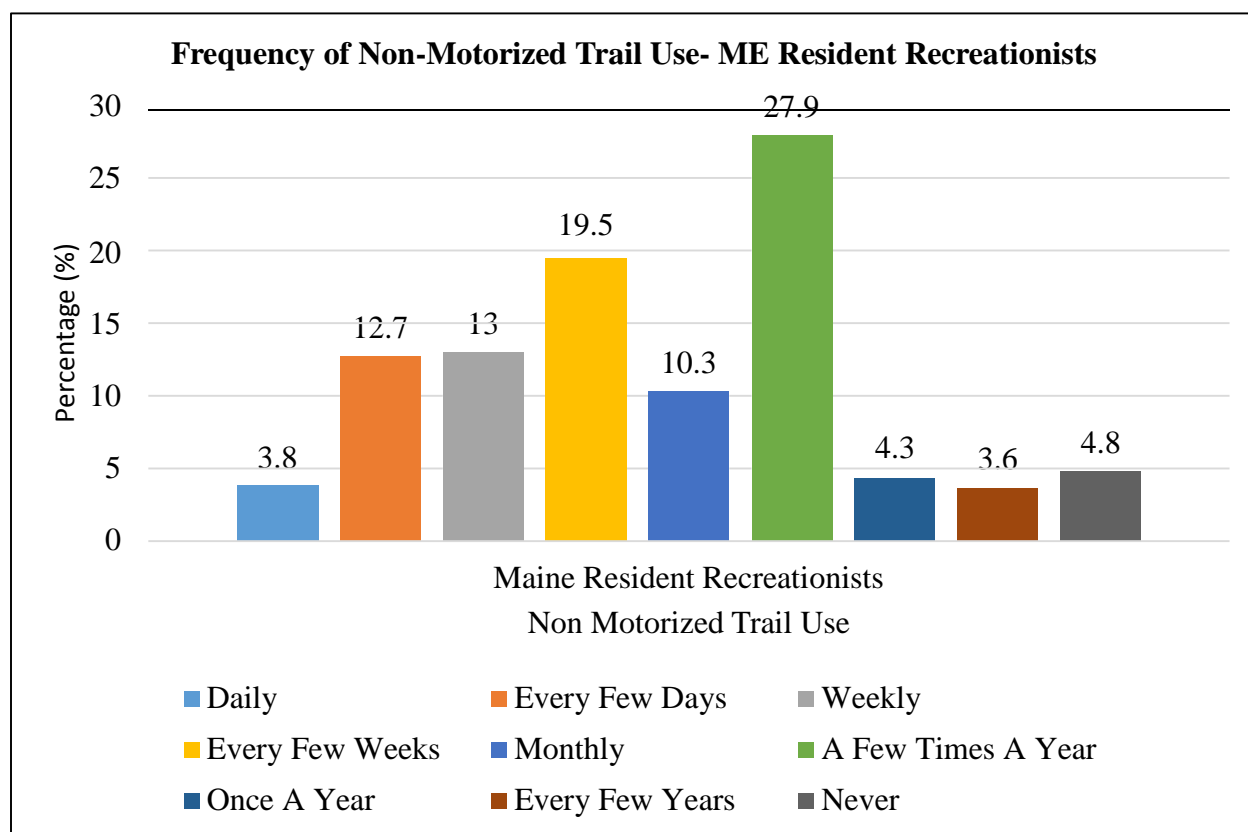


Figure 13. The Relative Amount of Time the Maine Resident/Recreationists Segment Pursue Activities on Non-Motorized Trails.

A key finding for the frequency of pursuing activities on different trail types was that, overall, the Maine Resident/Recreationists are relatively active trail users. This segment reported that 59.3% of respondents participate in non-motorized trail activities at least once a month and 87.2% participating at least a few times a year. Very few individuals (4.8%) appear to never use non-motorized trails opportunities. As Figure 14 (below) shows, a much greater portion, however, never use motorized trails (24.3%). Given that cost and interest in participating may preclude more individuals from participating reasonably explains this difference. A strong minority of respondents utilize motorized trails at least once a month (37.1%) while a majority of that group use motorized trails at least a few times a year (62.6%). In contrast, Figure 15 (below) shows nearly half (48.5%) use multi-use trails at least once a month, with the great majority utilizing these at least a few times a year (80.0%).

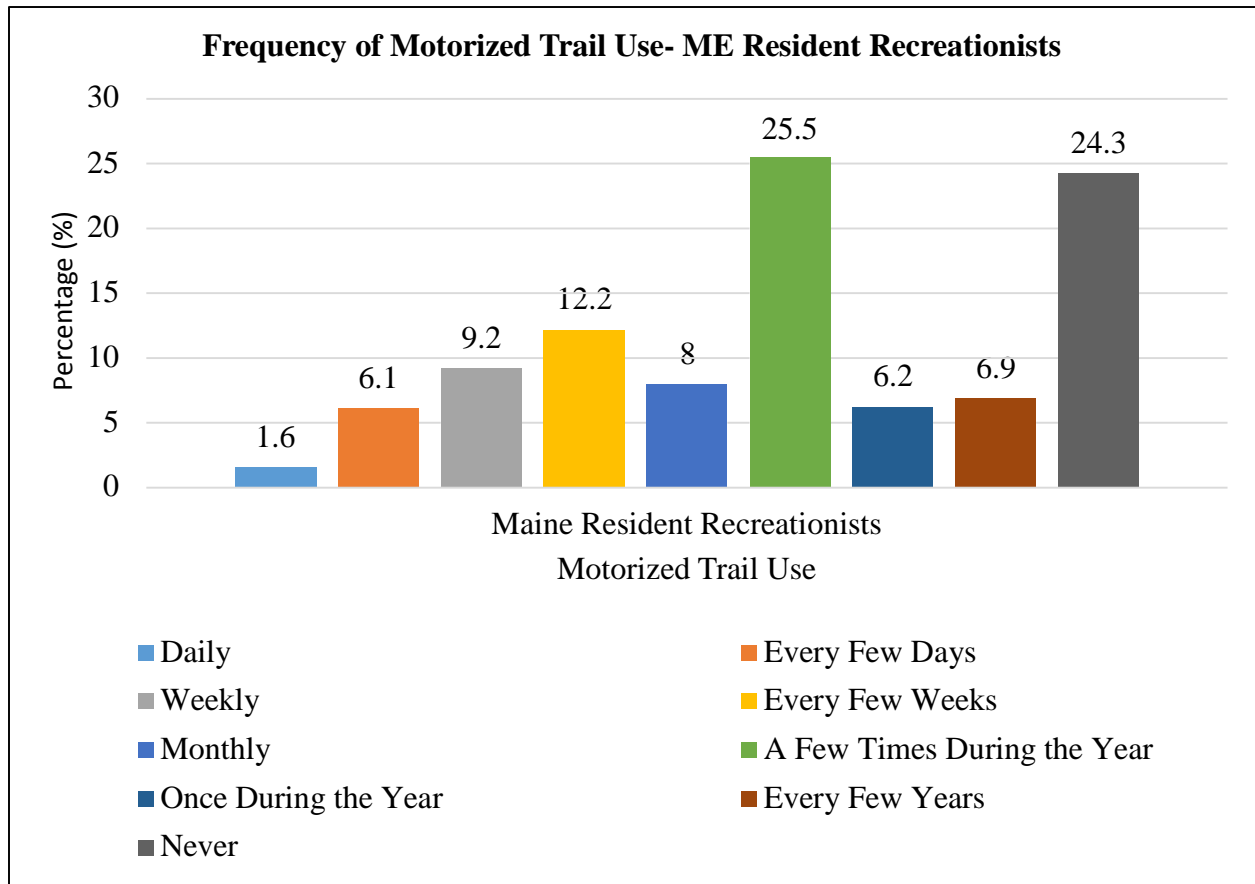


Figure 14. The Relative Amount of Time the Maine Resident/Recreationists Segment Pursue Activities on Motorized Trails.

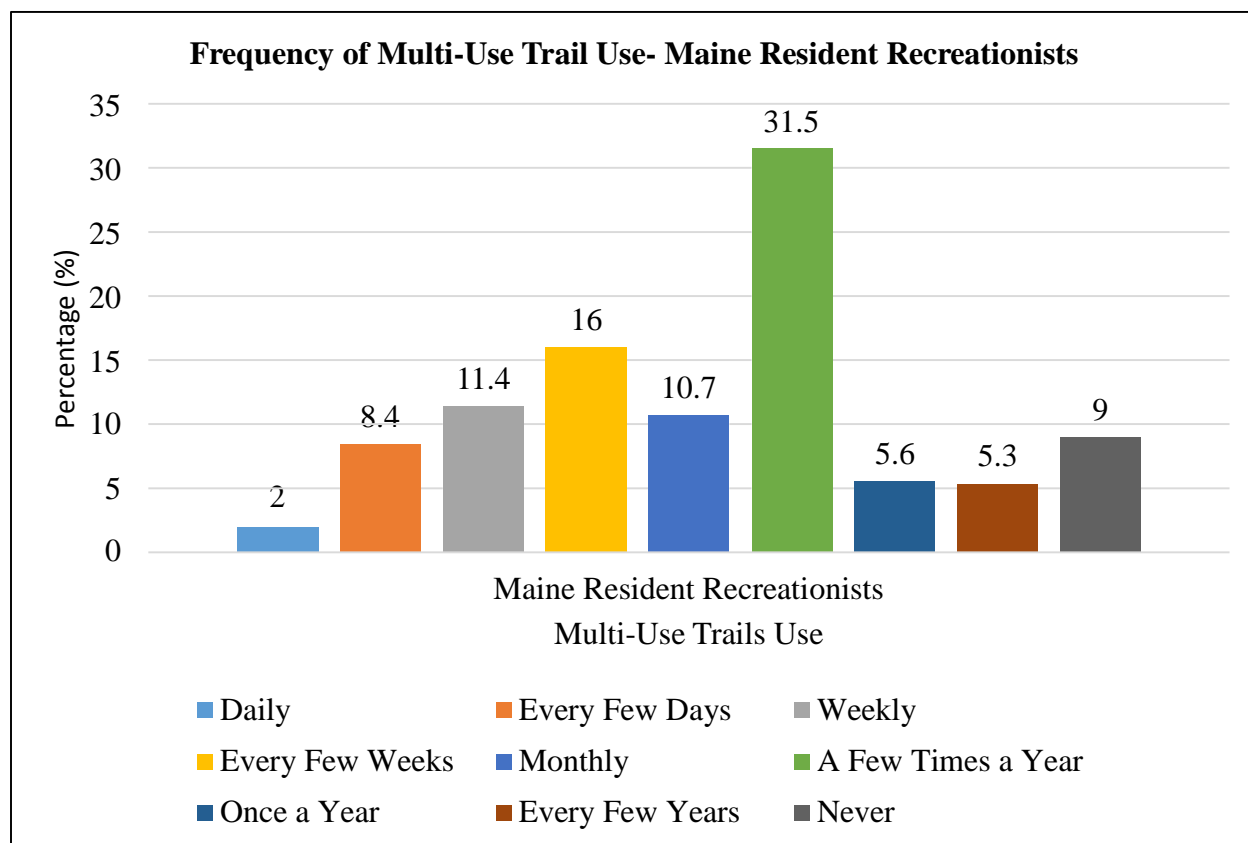


Figure 15. The Relative Amount of Time the Maine Resident/Recreationists Segment Pursue Activities on Multi-Use Trails.

Since the majority of each survey segment are active users of the various trail types found throughout Maine, their insights into what types of trail opportunities need to be expanded in the state are undoubtedly useful. Tables 13 and 14 (below) describe the extent to which respondents believed that a diverse mix of non-motorized and motorized needs to be expanded in Maine. Table 13 shows there is a noticeable pattern between the types of non-motorized trail opportunities that each of the segments feel need to be expanded. It was clearly indicated by many respondents from each of the segments that easy trails in natural settings need to be expanded in Maine. Also, there appears to be a very high demand for more interpretive natural history/educational trails and moderate day hikes in natural settings. The segments representing Maine residents also feel that trails with handicapped access need to be expanded as well. It seems that, overall, there exists some level of interest in expanding all types of non-motorized trail opportunities. It is important to note that data was not collected on the *frequency* that respondents utilize these types of trail opportunities. Therefore, it is not entirely clear whether or not individuals may have based their responses to this question (and the motorized trail question) based on the types of trail opportunities that they most favor (and would like to see more of) or genuine perceptions of a lack of specific trail resources.

Table 13. Non-Motorized Trail Resources Rated as Either 'Needed' or 'Very Needed' by the Three Primary Survey Segments.

MOST NEEDED NON- MOTORIZED TRAIL RESOURCES	Maine General Population (%)	Maine Resident/ Recreationists (%)	Non-Resident/ Recreationists (%)
#1 Most Needed	Easy trails in natural settings (71.1)	Easy trails in natural settings (59)	Easy trails in natural settings (43.8)
#2 Most Needed	Educational/nat. history trails (60)	Educational/nat. history trails (54.2)	Moderate day hikes in nature (43.7)
#3 Most Needed	Moderate day hikes in nature (56.2)	Moderate day hikes in nature (53.1)	Educational/nat. history trails (41)
#4 Most Needed	Easy/moderate off road biking (52.2)	Handicapped accessible trails (46.9)	Paddle trails without motorboats (36.9)
#5 Most Needed	Handicapped accessible trails (52.1)	Easy/moderate off road biking (46.3)	Long/remote day hikes (36.6)
#6 Most Needed	Snowshoeing trails (48.1)	Snowshoeing trails (44.6)	Easy/moderate off road biking (31)
#7 Most Needed	Long/remote day hikes (38.2)	Paddle trails without motorboats (42.8)	Handicapped accessible trails (28.4)
#8 Most Needed	Paddle trails without motorboats (37.6)	Long/remote day hikes (42.8)	Remote/multi-day backpacking (28.3)
#9 Most Needed	Groomed X-Country ski trails (37.5)	Groomed X-Country ski trails (38.8)	Snowshoeing trails (23.8)
# 10 Most Needed	Remote/multi-day backpacking (26.5)	Remote/multi-day backpacking (32.6)	Groomed X-Country ski trails (21.1)

As shown in Table 14, it appears that the most needed motorized trail resources are trail opportunities for ATVs and snowmobiles that connect Maine communities together. This is a positive indicator that motorized trail users are interested in opportunities that can strengthen the nature-based tourism resources in an area and potentially have a beneficial economic return for involved communities. Also, it seems that having motorized recreational access close to home is also highly considered to be either 'needed' or 'very needed' by, particularly, state residents. Since a large portion of the Maine Resident/Recreationists only use motorized trails a few times during the year or less, expanding community-connecting trail opportunities may cultivate more interest in the activity. Residents also did not believe that there is a high need for expanding trails with

challenging terrain or ATV/rail trail/shared use trails. It is important to note that for many of the trail expansion questions, a large portion of respondents had a 'neutral' attitude toward these items. This may reflect either a lack of knowledge regarding trail resources that were already available or they were simply not strongly interested in the ideas but would not object to their development.

Table 14. Motorized Trail Resources Rated as Either 'Needed' or 'Very Needed' by the Three Primary Survey Segments.

MOST NEEDED MOTORIZED TRAIL RESOURCES	Maine General Population (%)	Maine Res. /Recreationists (%)	Non- Resident/Recreationists (%)
#1 Most Needed	Community linking ATV trails (36.8)	Community linking ATV trails (42.3)	Community linking ATV trails (25.7)
#2 Most Needed	Community linking snowmobile trails (30.3)	Community linking snowmobile trails (40.2)	Remote/vista ATV trails (23.9)
#3 Most Needed	Close-to-home snowmobiling (28.4)	Off trail snowmobiling (38.1)	Community linking snowmobile trails (23.2)
#4 Most Needed	Close-to-home ATV (27.1)	Close-to-home ATV (37.5)	Off trail snowmobiling (22.8)
#5 Most Needed	Off trail snowmobiling (25.7)	Remote/vista ATV trails (37.3)	Remote/vista snowmobile trails (20.9)
#6 Most Needed	Remote/vista ATV trails (24.3)	Close-to-home snowmobiling (36)	Close-to-home ATV (19.4)
#7 Most Needed	Shared/groomed snowmobile trails (24.3)	Remote/vista snowmobile trails (33.5)	Close-to-home snowmobiling (19)
#8 Most Needed	Remote/vista snowmobile trails (23.7)	Shared/groomed snowmobile trails (30.8)	ATV/rail trail/shared use trails (17.7)
#9 Most Needed	ATV/rail trail/shared use trails (22.7)	ATV/rail trail/shared use trails (29.9)	Shared/groomed snowmobile trails (16.8)
# 10 Most Needed	ATV trails with challenging terrain (14.7)	ATV trails with challenging terrain (18.7)	ATV trails with challenging terrain (13.9)

3.8. Experiences and Services at Maine State Parks

A key objective of this study was to evaluate how Maine State Parks are used and what may be done to help improve the quality of the experiences they offer. It was found that the vast majority of respondents had been to a Maine State Park at least once in that past two years. An overwhelming 95.6% of both the Maine General Population and Maine Resident/Recreationists had visited during that time. The majority of Non-Resident/Recreationists (76.3%) had visited during that time as well.

Respondents were asked about how expensive they believe it is to visit Maine State Parks. Figure 16 shows that most respondents feel that the pricing is appropriate. A larger portion of the Maine Resident/Recreationists felt that visiting was more expensive than the other segments reported. This difference in attitudes likely corresponds with the fact that the Non-Resident/Recreationist segment on average earns a higher annual household income. Analysis also showed that demographically, those who had visited and not visited were quite similar

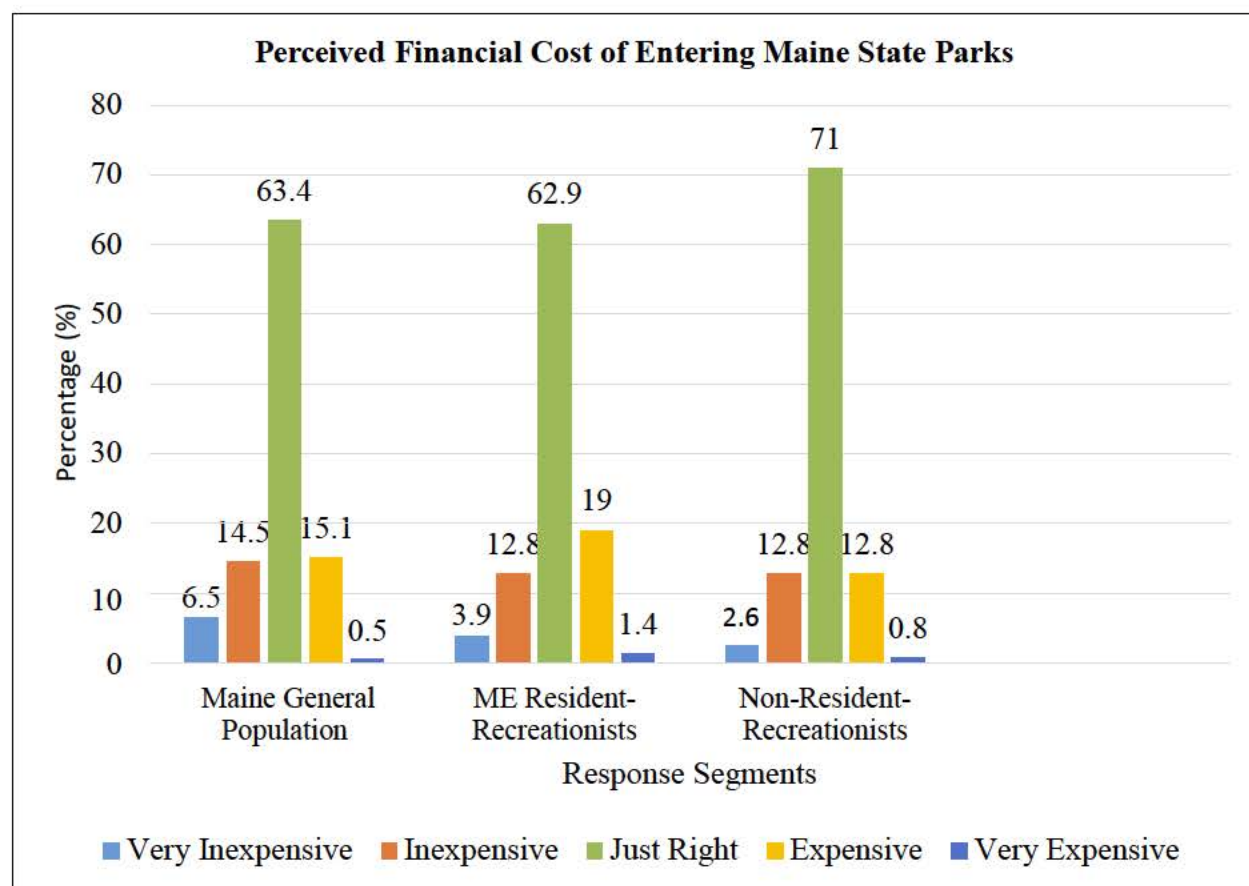


Figure 16. The Relative Perceived Financial cost of Maine State Park Entrance Fees by the Three Primary Survey Segments.

Respondents were asked to report how frequently they used Maine State Parks by season. This was done in order to develop a greater understanding of how Maine State Parks are used over the course of a year. Table 15 describes the seasonal use of Maine State Parks by the Maine Resident/Recreationists. As predicted, residents visit Maine State Parks far more frequently during spring, summer and, autumn then they do during the winter. It is revealing that a modest portion of participants (27.6%) visit Maine State Parks at least a few times a year during winter months.

Table 15. The relative Frequency of Visiting Maine State Parks by Season for the Maine Resident/Recreationist Segment

SEASONAL FREQUENCY	Spring (%)	Summer (%)	Autumn (%)	Winter (%)
Daily	0.4	1.0	0.6	0.2
Every Few Days	1.5	4.2	2.3	0.8
Weekly	2.5	7.5	4.9	1.1
Every Few Weeks	7.9	15.5	12.4	4.0
Monthly	7.7	12.0	10.2	3.7
A Few Times/Year	27.7	35.7	31.1	17.7
Once a Year	18.7	12.9	17.9	14.1
Every Few Years	14.8	7.6	10.4	16.0
Never	18.7	3.5	10.2	42.3

In order to assist with planning for the resources and amenities that are provided at Maine State Parks, respondents were asked which types of amenities they most appreciate and/or would like to potentially see offered at Maine State Parks. Figure 17 (below) illustrates, in descending order, which of these items are most appreciated or demanded. It appears that many visitors to Maine State Parks are interested in seeing an expansion of water consuming resources (flush toilets, showers, RV water hookups). A sizable portion of Maine residents also appreciate hand carry and trailered boat launches being offered. There also exists level of demand for certain other amenities that are not typically offered at Maine State Parks. Cabins/yurts and Wi-Fi access are limited at State facilities and may be desirable to certain types of visitors.

Respondents were also asked to rate how interested they were in participating in a variety of event and programming opportunities that are currently offered, or potentially could be offered at Maine State Parks. Table 16 (below) highlights the top five activities each of the segments were most interested in. The survey segments each have a relatively high level of interest in a particular set of similar activities. Educational opportunities in Maine State Parks were rated as the most

desirable services. The most popular opportunity, self-guided educational hikes, represents a high level of interest in informal education. There is also a high level of demand for organized educational activities which include instructional programs and night sky events. Also, a large portion of Maine residents reported that they are interested in volunteering at Maine State Parks. This indicates that coordinated volunteer efforts may be useful for expanding educational services for the public.

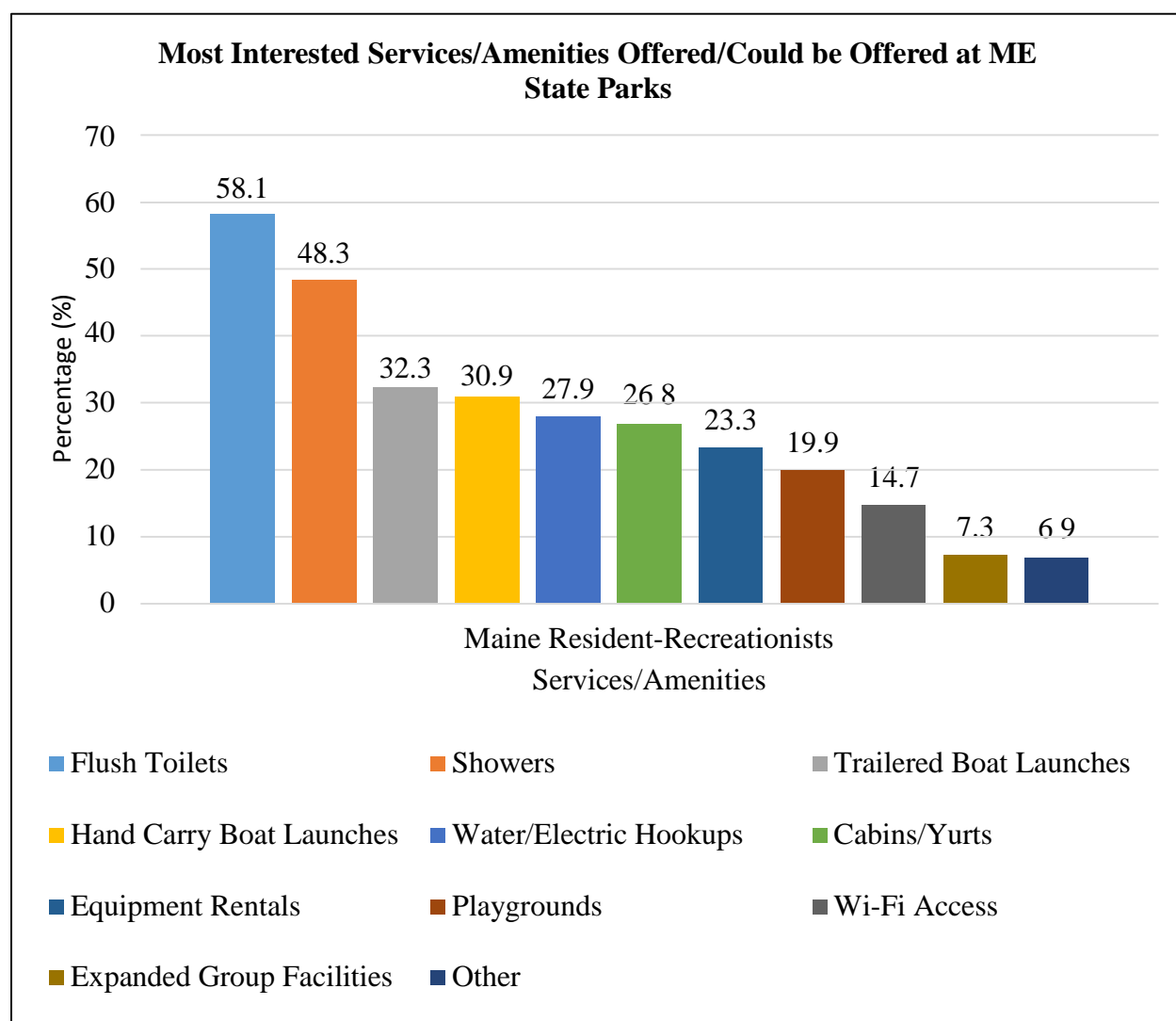


Figure 17. The Services/Amenities the Maine Resident/Recreationists most Appreciate Having Offered or potentially could be Offered at Maine State Parks.

Table 16. The Top Five Activities/Services the Three Primary Survey Segments Like Having Offered or Potentially Offered at Maine State Parks.

DESIRED ACTIVITIES/SERVICES	Maine General Population (%)	Maine Resident/ Recreationists (%)	Non-Resident/ Recreationists (%)
#1 Most Interested	Self-Guided Edu. Hikes (71.5)	Self-Guided Edu. Hikes (65.9)	Self-Guided Edu. Hikes (59.6)
#2 Most Interested	Instructional Programs (51.6)	Instructional Programs (50.3)	Instructional Programs (49.3)
#3 Most Interested	Night Sky Events (48.9)	Night Sky Events (48.3)	Night Sky Events (47.2)
#4 Most Interested	Guided Nature Walks (46.3)	Outdoor Sporting Events (45.3)	Guided Nature Walks (39.4)
#5 Most Interested	Volunteer in the Parks (41.9)	Volunteer in the Parks (43.1)	Outdoor Sporting Events (36.6)

A very small minority of respondents from each of the segments indicated that they had not ever been to a Maine State Park. All individuals who reported that they had never visited one before were asked to indicate any reason(s) for not visiting. Table 17 displays the relative level of constraints for not visiting. Although financial cost is typically cited as a major factor in limiting participation in outdoor activities, this was not found to be the most significant overall constraint. Having other recreational priorities was found to be the greatest overall reason for not visiting.

Table 17. Reasons that Maine State Park Non-Users Have Not Visited A Maine State Park

REASONS FOR NOT VISITING A MAINE STATE PARK	Maine Resident/ Recreationists (%)	Non-Resident/ Recreationists (%)
Too expensive	16.7	2.5
Too far away	23.6	21.7
Not interested	22.0	18.2
Family status (need to care for young or elderly family members)	9.1	5.5
Physical difficulties/strain	5.5	1.9
Too busy	31.3	19.8
I have other recreational priorities	47.0	52.6
Lack of knowledge about ME State Parks	20.5	23.2
Too many rules/restrictions	15.8	3.5
Other	7.2	5.8

Also, many respondents also listed that having a lack of knowledge about Maine State Parks as a key reason for not choosing to visit. This may be a signal that many individuals who have other recreational priorities may not be fully aware of the opportunities that are offered at Maine State Parks and their ability to support their interests. Being too busy also accounted for a large portion of respondents not visiting as well and was distinct from choosing to participate in other activities. When interpreting the results it is important to observe the actual level of interest that non-users have in Maine State Parks. Only 22.0% of the Maine Resident/Recreationists and 18.2% of the Non- Resident/Recreationists expressed that they were not interested in visiting. This indicates that these constraints are clearly limiting respondents from participating in activities that they would *like* to do.

A unique comparison was made to examine the relationship between the effects of constraints to recreating in general (asked previously in the questionnaire) to constraints to visiting Maine State Parks. Figure 18 illustrates this comparative relationship. It was found that for many of the factors that limited non-users participation in recreational activities in general limited their ability to visit Maine State Parks *to a greater extent*. While lack of knowledge was only a

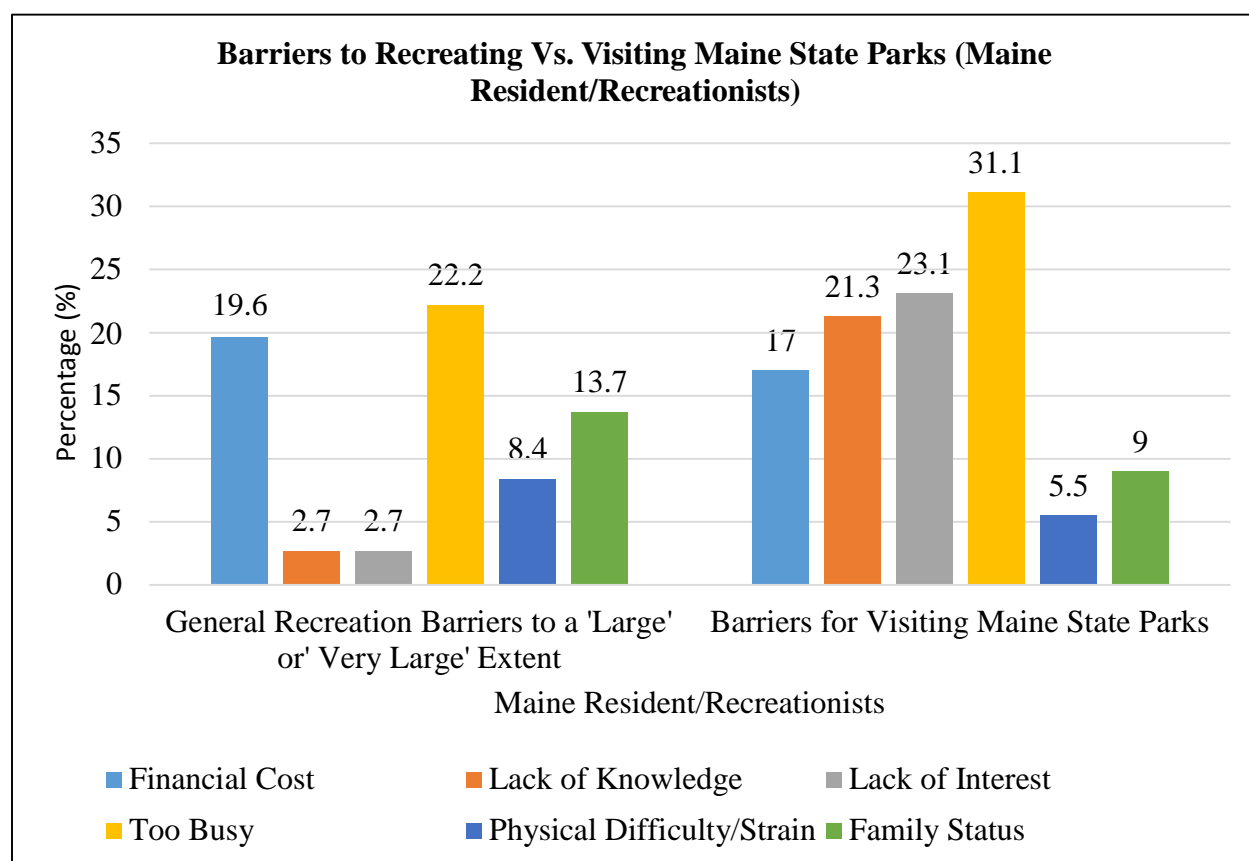


Figure 18. A Relative Comparison between Barriers to Participating in Outdoor Activities and visiting Maine State Parks.

limitation to recreating in general for 2.7% of the respondents, that factor jumped to 21.3% when the same set of individuals were asked about how lack of knowledge limits their visitation to Maine State Parks. This strongly implies that while nearly all individuals who had not visited a Maine State Park believe they had adequate enough knowledge to do what they want to do, a large portion of them simply lacked knowledge about Maine State Parks. Similarly, a moderate portion of respondents (22.2%) specified that they were too busy to recreate in general but a greater number of those respondents reported that they were too busy to visit a Maine State Park. This shows that while most non-users are able to find time to engage in some form of recreation, a larger portion of those individuals are simply not visiting Maine State Parks. This is likely linked to the level of expressed interest in recreating in general (2.7%) and interest in visiting Maine State Parks (23.1%). This further proves that non-users are interested in recreating, just not at State Parks.

There are also clearly a number of factors that may make recreation participation *easier* for Maine residents at Maine State Parks. While physical difficulty/strain was a limitation for 8.4% of non-users, fewer of those individuals cited that as a reason for not visiting a Maine State Park. This indicates that the facilities offered at Maine State Parks may make it easier for individuals with disabilities to recreate who may not otherwise. Also, fewer non-respondents believed that their family status limited them from visiting Maine State Parks than recreating in general. This shows that the setting and amenities offered at Maine State Parks can help support families who may have difficulties recreating in other types of sites.

All respondents were asked about their attitudes toward conserving land in Maine. Figure 19 (below) illustrates how much with this idea of conserving Maine lands with recreational access. It was found that the vast majority of respondents either agreed or strongly agreed with the statement “how much [do you] feel that conserving Maine land with recreational access should be a priority for the State of Maine”. This shows that regardless of individuals’ level of participation in recreational activities or demographic characteristics, almost all of the survey segments believe that conserving Maine land is an important objective for the State of Maine.

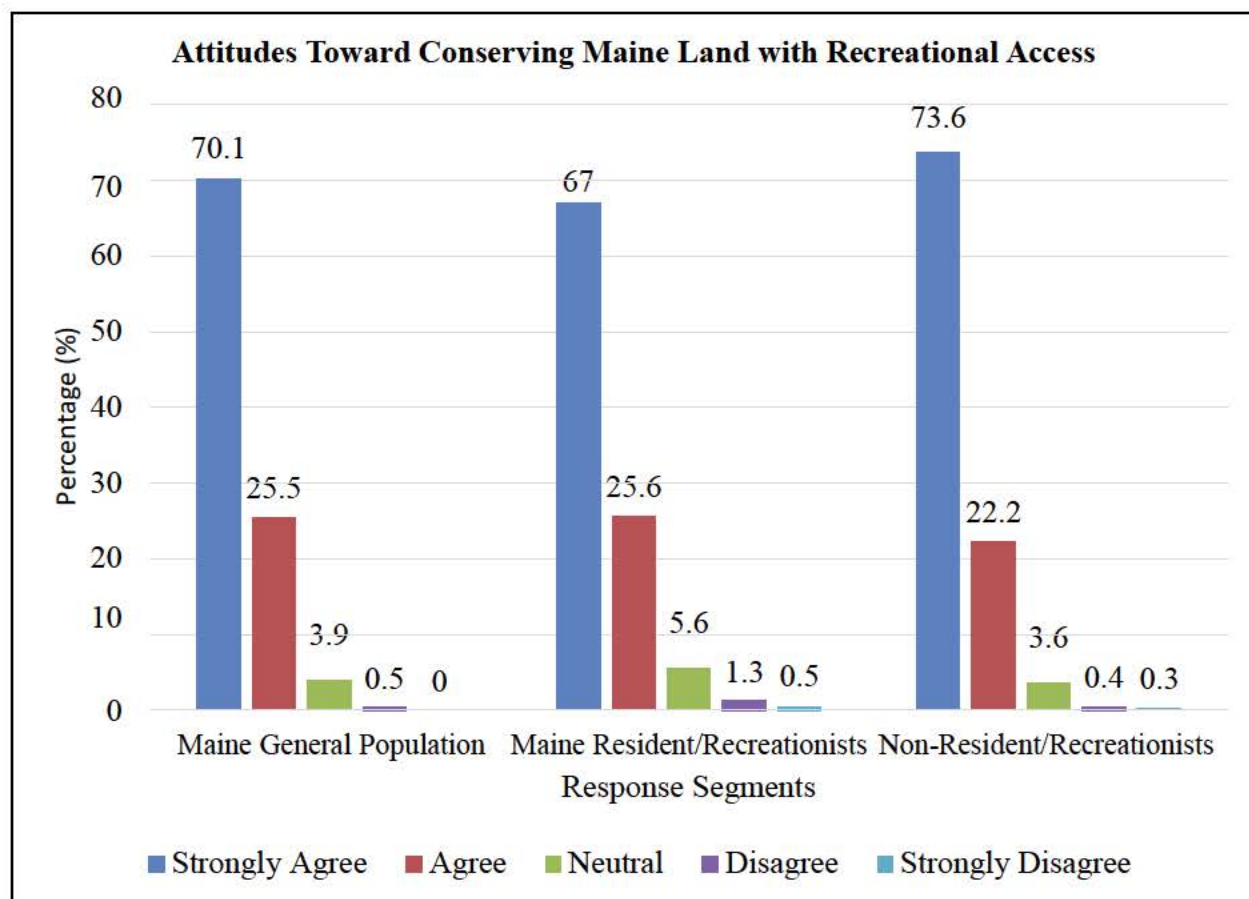


Figure 19. The Relative Attitudes of each of the Survey Segments Regarding the Conservation of Maine Land with Recreational Access.

3.9. Geographic Variances across Maine

In order to make meaningful comparisons between residents from different parts of the Maine, location information was analyzed for all of the relevant questions in the survey. Since the Maine General Population Sample had relatively few overall responses, their data could not be used to generate reliable analysis at the county level. Since some counties did not have enough responses to generate reliable results, responses from each county were categorized into four regional categories. Table 18 illustrates the percentage of respondents that represent each region from the survey sample as compared to 2010 U.S. Census data. The four regional categories; the “Crown/Eastern”, “Maine Mountains”, “Southern Coast”, and “Mid-Coast”, were found to have a relatively similar level of response as the 2010 U.S. Census. This comparison is important because it shows that the study was able to mirror a geographic representation of Maine residents’ distributions, highly adding to the confidence in the results and our ability to generalize to those groups.

Table 18. Grouping of Maine Counties for Regional Analysis and Percent of Respondents from each Region (ME Resident/Recreationists only).

REGIONAL GROUPING	Counties Included	Maine Resident/ Recreationists (%)	2010 Population [U.S. Census]
“Crown/Eastern”	Washington, Hancock, Penobscot, Aroostook	24.2	23.4
“Maine Mountains”	Oxford, Androscoggin, Franklin, Somerset, Piscataquis	20.6	19.9
“Southern Coast”	York, Cumberland	31.3	36.3
“Mid-Coast”	Kennebec, Sagadahoc, Lincoln, Knox, Waldo	24.0	20.3
Total		100	100

The regional analysis conducted showed only a few specific variables had relevant differences on a regional scale. These variables included the use of private seasonal residence for overnight visits, the portion of residents that had visited a Maine State Park over the past two years, and the portion of residents that have engaged in snowmobiling over the past two years. Table 19 illustrates the differences found pertaining to the use of private seasonal residences for overnight visits. Analysis revealed that Maine residents from the Southern Coast use private seasonal residences somewhat more often than in other regions of the state. This may be partly influenced by having a higher annual household income than the other regions and they may be more likely to afford to own a secondary residence.

Table 19. Incidence of Using Private/Seasonal Residence for an Overnight Visit for each of the Study Regions over the Past Two Years (2012-2014).

PRIVATE SEASONAL RESIDENCE USE	Crown/Eastern	Maine Mountains	Southern Coast	Mid-Coast
Percent (%)	43.0	40.8	50.3	44.7

Another regional variance of note was the use of Maine State Parks by region over the past two years (Table 20). Residents from the Mid-Coast region were most likely to have visited a Maine State Park (85.1%). This is likely due to the relatively high concentration of State Parks in the region over a limited area. This finding, however, is only somewhat relevant to highlight since

residents from all over the state visit Maine State Parks quite frequently with only the Crown/Eastern region displaying a significant difference.

Table 20. Incidence of Visiting Maine State Parks for Each of the Study Regions over the Past Two Years (2012-2014).

VISITING MAINE STATE PARKS	Crown/Eastern	Maine Mountains	Southern Coast	Mid-Coast
Percent (%)	72.2	78.1	78.6	85.1

A third unique regional variance was the incidence of snowmobiling in Maine. Table 21 illustrates these regional differences that were found. It was identified that Maine residents from the Crown/Eastern and Maine Mountains regions were more likely to have participated in snowmobiling over the past two years than other regions of the state. These regions are certainly more rural and they likely have a wider diversity and availability of snowmobiling opportunities than other regions of the state.

Table 21 . Incidence of Snowmobiling for each of the Study Regions over the Past Two Years (2012-2014).

SNOWMOBILING	Crown/Eastern	Maine Mountains	Southern Coast	Mid-Coast
Percent (%)	37.7	38.4	26.3	29.4

3.10. Differences Based on Age

Generally speaking, age was not a significant driver of responses for many questions on the survey. It was relevant however to examine the following questions for differences based on age: types of settings are most favored, visitation to a variety of outdoor recreation/conservation sites found throughout Maine, activities pursued, frequency of participation, recreational barriers, and activities most interested in seeing offered at Maine State Parks. Respondents' age were categorized into the following four groups: 18-34, 35-51, 52-68, and 69-102. These age groups had different unequal response levels. The 18-34 age group had 1,244 responses (14.2% of total respondents), 35-51 had 3,427 responses (40% of total respondents), 52-68 had 3, 637 responses (41% of total respondents), and 69-102 had 483 responses (5.5% of total respondents). These different levels of response from the different age groups shows what other studies have mentioned in terms of the age groups more likely to engage in outdoor recreation activities. The results described in this section pertain specifically to the Maine Resident/Recreationists segment.

It was found that the 18-34 and 69-102 age groups were the most different while the 35-51 and 52-68 were relatively similar for most of the questions asked. Also, the 35-51 and 52-68 year age groups consistently responded to questions somewhere between the 18-34 and 69-102 groups indicating that for many questions, age was a significant factor to analyze. For the types of settings most favored, the 18-34 age group were the most likely to prefer backcountry trails, beaches, coastal trails, mountains and playgrounds. The other age groups, however, did find these settings to be highly desirable as well. For visiting specific types of sites throughout Maine, the 18-34 group was most likely to have visited Baxter State Park, farms/agricultural sites, local parks, and Maine Public Reserved Lands sometime over the past two years. It is important to recognize that this does not indicate that older age groups were less likely to have *ever* visited these sites, but they were less likely to have visited them in recent past. The 18-34 age group was also the most active in the largest variety of outdoor activities including bicycling, downhill skiing, hiking, ice fishing, kayaking, mountain climbing, outdoor festivals, river rafting, snowboarding, snowmobiling, sunbathing/tanning, and swimming. Given that many of these activities are physically intensive, it is understandable that younger individuals would be more likely to participate. These trends in activities also give reason to the fact that the 18-34 age group was also most likely to report pursuing day outings and overnight outings more frequently as well. The 69-102 age group was the most likely individuals to pursue birdwatching, driving for pleasure and hunting. For the most part though, all of the age groups most typically have overnight outings a few times during the year.

The most important differences found between the age groups were their barriers to participation. The 18-34 group was most likely to be limited from engaging in outdoor activities due to financial costs and lack of transportation. The 69-102 age group was least likely to be limited by their family status but were more likely to perceive danger/risks to a small extent. They were also the least likely group to indicate that they were too busy to participate in activities as the vast majority (81.1%) of the 69-102 age group were retired. The different age groups also had varying levels of interest in activities/programs that could be/are offered at Maine State Parks. The 18-34 group was most interested in volunteer in the park and opportunities for swimming lessons. The 69-102 were most interested in guided nature walks and adaptive recreation events.

3.11. Profile of Private Seasonal Residence Users

As noted previously in Table 11, a very high proportion of the Maine Resident Recreationists (45.6%) and Non-Resident Recreationists (44.0%) had used a private seasonal residence as a form of overnight accommodation to pursue outdoor activities sometime over the past two years. This signaled that the Non-Resident Recreationists had close ties to the State of Maine and that they either owned property in the state or had friends or family members that they stay with. Although the Maine General Population sample was significantly smaller, 37.3% indicated they had used a private seasonal residence. This does show however that the other samples were certainly more

likely to have used a private residence, but not by a large margin. Analysis was conducted to determine if there were any significant differences between those who use and do not use private seasonal residences and the major findings of these tests are depicted in Tables 22 and 23.

Maine Resident/Recreationists Using Private Seasonal Residences: Of the 9043 respondents from this sample, 4123 individuals reported that they had used a private seasonal residence while pursuing outdoor recreation activities on at least one occasion over the last two years. These private seasonal residence users favored lakes

Table 22. Locations Visited and Activities Pursued More by Users of Private Seasonal Residences in Maine (Maine Resident/Recreationists)

VARIABLE	Percentage (%)	Percent More than Those Not Using Private Seasonal Residences
Locations Visited/Preferred		
Recreating on Private Land	77.4	+13.9
Visiting Land Trusts	57.2	+12.1
Visiting ME Public Reserved Lands	51.3	+8.9
Visiting Farms and Agricultural Sites	54.3	+8.6
Lakes as "Very Desirable"	80.1	+7.6
Activities		
Motor Boating	65.5	+22.2
Snowmobiling	39.4	+14
Swimming	81.1	+13.2
Ice Fishing	51.8	+12.6
Canoeing	63.0	+11.1
Freshwater Kayaking	50.3	+11.1
Downhill Skiing	26.8	+10.4
Fishing on Open Water	78.6	+9.7
Riding an ATV	39.2	+8.8
Hunting	62.5	+8.0

One clear trend that emerged was that users of private seasonal residences were more likely to participate in a wide array of water based activities and consider lakes and ponds to be a "very desirable" setting for recreating. It was also found that this group was not any more interested in recreating at beaches than others. This strongly suggests that lake houses and rustic cabins are probably the most popular form of overnight private seasonal residence that was used. Although it is likely that a large portion of respondents actually own a private seasonal property, they were not found to be any more active in perusing day or overnight outings than non-users. This group of seasonal residence users were also more likely to obtain recreation and travel information from

local people, but not necessarily family and friends, which implies that they are comfortable engaging with the people living near their residence and that a large portion of these respondents actually own these private seasonal residences and are not simply visiting their relatives. As expected, the seasonal residence users had a significantly higher income than non-users; no difference gender was identified.

Non-Resident/Recreationists Using Private Seasonal Residences: Of the 6292 respondents from this sample, 2771 individuals reported that they had used a private seasonal residence while pursuing outdoor recreation activities on at least one occasion over the last two years (44%). Overall, it was found that the Non-Resident/Recreationists using private seasonal residences were highly similar to the Maine Resident/Recreationists. This group was also much more active in a diverse set of water based activities. Table 23 illustrates exactly how much more this group favored certain settings and activities than Non-Resident/Recreationists who did not report using a private seasonal residence.

Table 23. Locations Visited and Activities Pursued More Often by Users of Private Seasonal Residences (Non-Resident/Recreationists)

VARIABLE	Percentage (%)	Percent More than Those Not Using Private Seasonal Residences
Locations Visited/Preferred		
Recreating on Private Land	64.0	+18.7
Visiting Local Municipal Parks	43.8	+13.7
Lakes as "Very Desirable"	82.1	+12.8
Visiting Farms and Agricultural Sites	27.9	+11.3
Visiting U.S. Fish and Wildlife Refuges	34.3	+10.0
Visiting Land Trusts	33.9	+9.4
Activities		
Fishing on Open Water	72.2	+28.6
Motor Boating	46.9	+28.2
Swimming	60.2	+24.2
Canoeing	53.7	+22.2
Attending Fairs/Community Events	45.4	+18.2
Kayaking on Fresh Water	37.0	+16.0
Ice Fishing	19.5	+12.3

Table 23 Continued...

Viewing Wildlife	65.4	+12.2
Riding an ATV	22.2	+11.4
Sunbathing/Tanning	27.8	+11.4
Snowmobiling	16.9	+10.1
Attending Outdoor Festivals	27.3	+9.8
Enjoying Nature	69.6	+9.4
Driving for Pleasure	61.9	+9.4
Hunting	44.4	+9.2
Birdwatching	29.6	+8.9

As mentioned previously, the Non-Resident segment was highly similar to the Maine Residents segment. They recreated a similar amount of time as non-users, more likely to ask local people about recreation and travel information, and more likely to make more than \$110,000 a year than non-users. Some revealing differences did emerge however. The Non-resident users were more likely to ask family/friends about recreation and travel information which indicates that a higher portion of these individuals may be coming to visit and stay with family and friends in Maine instead of owning a secondary residence in the state (but undoubtedly many in the group do indeed). The non-resident users were also significantly less likely to engage in nearly all forms of camping which simply indicates that they spend more of their time at a private seasonal residence.

3.12. Characteristics Based on Level of Annual Household Income

Analysis was conducted to determine what types of differences could be observed between respondents based on their annual household income. Respondents were divided into three categories: “low income” (\$0-\$39,999/year), “median income” (\$40,000-\$79,999/year), and “high income” (\$80,000/year or higher). This analysis was conducted for the Maine Resident/Recreationists only. A total of 8,208 individuals reported their annual income. The low income group had 1,343 individuals (16.4% of total respondents), the median income group had 3,230 individuals (39.4% of total respondents), and the high income group had 3,635 individuals (44.3% of total respondents). It is important to note that in the low income category, respondents were much more likely to earn between \$20,000-\$40,000/year than between \$0-\$19,999/year. Also, nearly half of the respondents in the high income group made more than \$110,000/year (the highest reportable dollar amount). Throughout this section, specific statistics are not presented in order to develop a clear narrative description of the effects of income. The primary criteria for assessing differences was there had to be at least a 10% *difference* in outcomes being compared to be considered observably significant. The full statistical outputs are available in the appendix of this report. Of the three different categories, the low income and high income groups had the most

pronounced differences. In essentially all cases, the median income group was somewhere in between the other two groups. It is not the purpose of the following descriptions of the low and high income groups to define them as a collective group, but rather provide insights into what types of items they are more *likely* to enjoy, pursue, etc.

For the low income group, there were several activities they were more likely to participate in than the higher income category including birdwatching, collecting wild plants, and doing nature photography over the past two years. This group was most likely to report that they were constrained from participating in activities due to financial cost and were most likely to believe that the entrance fees to Maine State Parks were too expensive. They also were more likely to express beliefs that trail access expansion for handicapped access and natural history trails with interpretive signage were ‘very-needed’ than the higher income group. The low income group expressed higher levels of interest in instructional programs and night sky events being offered or potentially offered at Maine State Parks. The low income group were also more likely to be retired, part time employed, or unemployed.

For the high income group, they were more likely to be involved in a greater number of activities including bicycling, cross country skiing, downhill skiing, golfing, kayaking (sea and freshwater, motor boating, and snowshoeing over the past two years. Having a higher income was also a greater predictor of having visited Acadia National Park or Maine land trust properties over the past two years as well. For overnight accommodations, the higher income group were more likely to stay at Maine sporting camps, a private seasonal residence, or hotels/motels. Lodging at high end/luxury accommodations was not significantly higher for this group. This group was also most likely to recreate more frequently during the winter months and recreate in Cumberland County than the low income group. Demographically, this group was more likely to be male, more educated, and be employed full time.

Perhaps the most important aspect of examining groups based on income is understanding what types of items are *not influenced* significantly by level of income. Overall, each of the different income groups found the variety of outdoor settings found in Maine to be equally desirable and were, with the exception of Acadia National Park, equally as likely to visit the conserved/outdoor recreation sites throughout the state. Aside from the examples given earlier in this section, income did not influence participation in the majority of activities that were included in the questionnaire. It also was found that regardless of income, the groups were as likely to engage in some form of recreational activities as day outings or overnight outings with the same frequency. The only notable difference was that the high income group was more likely to pursue outdoor activities on a weekly basis during the winter than the low income group. A key similarity between each of the groups was that, aside from the low income group being disproportionately affected by financial cost, income did not significantly influence any other barriers to participating in outdoor recreation. It was also found that each of the groups were equally as likely to go camping and spent the same amount of time on non-motorized, motorized, and multi-use trails. Aside from the low

income group most likely believing that natural history trails and trails with added accessibility for individuals with disabilities, each of the groups had the same level of interest in the expansion of other types of trail opportunities. The desirability of the range of facilities and amenities offered at Maine State Parks also was not found to be dependent on income. Aside from instructional programs and night sky events, the income groups expressed the same level of interest in programming opportunities at Maine State parks. Overall, level of income was not found to determine the level of interest in outdoor recreation but rather the variety of activities one may be more likely to pursue.

3.13. Characteristics Based on Level of Education

Given that there was a high level of interest in recreational activities and programs that involved some type of learning experience, it was highly relevant to examine individuals' responses based on their level of education. Respondents were divided into three categories: "low education" (less than high school or high school diploma/GED), "well educated" (some college completed, two-year college degree, four-year college degree), and "highly educated" (master's degree, doctoral degree, or professional degree). This analysis was conducted for the Maine Resident/Recreationists only. A total of 8874 individuals reported their highest level of education. The low education group had 1,267 individuals (14.3% of total respondents), the well-educated group had 5,958 individuals (67.1% of total respondents), and the highly educated group had 1,649 individuals (19% of total respondents). In a similar approach to the previous section no specific statistics are being presented and a 10% difference between groups was considered to be significant difference. For the most part, the low education group and the high education group differed the most while the well-educated group was somewhere in between the other two groups.

For the low education group, farms and agricultural sites was the only setting that they were more likely to prefer than the other groups. They were more likely to participate than the other groups in a wide variety of outdoor activities including driving for pleasure, fishing, hunting, motor boating, riding an ATV and snowmobiling. It was also found that this group was more likely to engage in outdoor day outings only a few times a year, but this only indicates that they are slightly less likely to engage in activities over time as the vast majority of this group participates in something at least once a month. For overnight outings this group was more likely to choose RV camping than the other groups. The low education groups was overall highly interested in trail activities but were least interested in non-motorized trails. Since they were most likely to use ATVs they were most inclined to believe that certain trail opportunity types including long interconnected ATV trails, remote/destination/vista ATV trails, ATV trails for riding close to home, shared use ATV trails, and ATV trails with challenging terrain need to be expanded in Maine. This group also most favored expanding long interconnected snowmobile trails, destination/vista snowmobile trails, snowmobile trails for riding close to home, groomed snowmobile trails shared with non-motorized uses, and snowmobile access for off trail riding. The low education group had a higher level of interest in a number of amenities and opportunities offered at Maine State Parks including

trailered boat launch access and water and electric hookups for camping. They were also most likely to believe that Maine State Parks entrance fees were expensive and least likely to visit them during the winter. For potential programs, they were the group most interested in participating in outdoor sporting events such as fishing derbies.

The highly educated group was more likely to find a wider variety of outdoor settings very desirable than the other groups including backcountry trails, beaches, coastal trails, and community trails. They were also more likely to have visited Acadia National Park, Baxter State Park, local municipal parks, Maine Public Reserved Lands, Maine State Parks, land trust properties, and the White Mountain National forest at some point during the last two years than the other groups. The highly educated group was also most likely to participate in the following activities than the other groups: bicycling, birdwatching, canoeing, cross-country skiing, downhill skiing, enjoying nature, hiking, freshwater kayaking, sea kayaking, mountain climbing, picnicking, sailing, snowshoeing, swimming, and visiting historical sites. This group was also more likely to pursue outdoor activities as overnight outings a few times a year than the other groups. For overnight visits the highly educated group was most likely to select a campgrounds with vehicle access, ones with fees, and bed and breakfasts. They were also the most likely group to recreate most often in Cumberland County. This group was also the most inclined to believe that moderate off road biking, groomed cross country ski trails, and primitive/ungroomed cross country ski trails need to be expanded in Maine. A key insight into possible reasons why this group is most likely to visit the widest variety of places is that they also the most likely group to use the widest assortment of travel resources including the internet, magazine articles, the Maine Bureau of Parks and Lands website, Maine guidebooks, newspaper articles, and talking with staff who work at public recreation areas. One unique difference the between the high and low education groups was that while the low education group was most likely to appreciate trailered boat launches at Maine State Parks, the highly educated group was most likely to appreciate hand carry boat launches.

The differences observed between groups with different levels of education appear to be more prevalent than differences based on level of income. In many respects, however, level of education was not found to be an influencing factor. While there were multiple differences associated with level of interest in recreating in certain settings, all of the groups had a similar interest in lakes and playgrounds. Each of the groups were also equally interested in backcountry camping and pursued recreational activities at a similar level of frequency during different seasons. An important similarity was that each of the groups reported equal levels of constraints to recreating in their lives: including lack of knowledge. Level of education did not influence the frequency of using motorized and multi-use trails, even though the low education group was significantly more likely to use ATVS and snowmobiles. Each of the groups also had a similar level of interest in the types of current/potential programming offerings at Maine State Parks except the low education group was more likely to be interested in outdoor sporting events.

3.14. Maine Resident Perceptions of Sustainable Tourism

All respondents who were residents of the State of Maine were asked to answer a set of questions regarding their attitudes toward tourism in their communities. Before this study, no comprehensive analysis had been done to evaluate Maine residents' perceptions towards sustainable tourism on a statewide level. There was relatively little variation in the differences in attitudes reported by the Maine General Population and the Maine Resident/Recreationists. This indicates that attitudes held by the Maine Resident/Recreationists also, for the most part, represent the attitudes of the general public as well. This supports the premise that an individual's recreational background does not necessarily formulate their attitudes about tourism in their community. Table 24 illustrates the attitudes held by the Maine Resident/Recreationists.

Table 24. Maine Resident Recreationists Responses to the SUS-TAS Questions.

TOURISM QUESTIONS	Strongly Agree (%)	Agree (%)	Undecided (%)	Disagree (%)	Strongly Disagree (%)
<i>Perceived Social Costs of Tourism Activities</i>					
"Tourists in my community disrupt my quality of life"	5.4	13.8	22.7	45.7	12.4
"My community is overcrowded because of tourism"	5.4	12.1	20.9	48.2	13.4
"My community's recreational resources are overused by tourists"	4.7	11.0	28.6	46.4	9.3
<i>Environmental Sustainability and Tourism</i>					
"My community's diversity of nature is valued and protected"	8.5	41.7	36.4	11.6	1.8
"Tourism development in my community always protects wildlife and natural habitats"	4.4	23.0	46.1	22.3	4.2
"My community's natural environment is being protected now and for the future"	5.9	34.3	40.1	16.7	3.1
"Tourism development in my community promotes positive environmental ethics"	6.7	31.0	45.5	13.9	2.8
"Tourism in my community is developed in harmony with the natural environment"	4.9	28.4	47.7	15.8	3.2
<i>Long-Term Tourism Planning Principles</i>					
"Tourism development needs well-coordinated planning"	28.4	55.0	14.0	1.9	0.7
"When planning for tourism, we can't be shortsighted"	27.4	51.1	18.6	2.2	0.7
"Successful management of tourism requires advanced planning"	32.2	54.7	11.0	1.6	0.5
"We need to take a long-term view when planning for tourism development"	31.2	52.3	14.1	1.8	0.6
<i>Perceived Economic Benefits of Tourism</i>					
"Tourism is a strong economic contributor to my community"	18.6	37.8	26.1	14.7	2.8
"Tourism benefits other than just tourism related industries in my community"	20.0	52.7	21.8	4.2	1.2

Table 24 Continued...

TOURISM QUESTIONS	Strongly Agree (%)	Agree (%)	Undecided (%)	Disagree (%)	Strongly Disagree (%)
"Tourism brings new income to my community"	23.4	52.5	17.2	5.7	1.2
"Tourism generates substantial tax revenue for my local government"	16.0	37.5	30.5	12.9	3.1
<i>Community Centered Tourism Business Economy</i>					
"Tourism businesses in my area should try to hire most of their employees from within the community"	33.1	49.2	13.9	3.4	0.5
"The tourism industry should try to purchase their goods and services within the local community"	36.9	49.9	11.1	1.8	0.3
"The tourism industry in my area should economically contribute to community improvement efforts"	24.7	56.0	16.6	2.2	0.6
<i>Ensuring the Satisfaction of Visitors</i>					
"Tourism businesses in my community must monitor visitors' satisfaction"	12.9	51.6	29.4	5.3	0.8
"Tourism businesses in my area should ensure good quality tourism experiences and opportunities for visitors"	21.4	59.7	17.0	1.4	0.5
"It is the responsibility of tourism businesses to meet visitors' needs"	12.3	48.8	28.4	9.5	1.0
"Community attractiveness is a core element of ecological 'appeal' for visitors to my area"	19.8	51.5	23.8	4.1	0.8
<i>Maximizing Community Participation in Tourism Efforts</i>					
"Tourism decisions in my area must be made by all members in the community regardless of a person's background"	16.7	40.9	27.6	13.0	1.7
"Full participation by everyone in my community regarding tourism decisions is a must for successful tourism development"	13.9	40.4	30.6	13.6	1.5
"Sometimes it is acceptable to exclude residents in my community from tourism development decisions"	3.2	13.9	25.2	38.4	19.4

Analysis was conducted to determine what types of characteristics shape residents' attitudes towards tourism. It was found that participation in hunting, fishing, and ATV experience did not have a notable influence on attitudes when compared to individuals from the sample that did not participate in those activities. With a similar result, annual income level, level of education, and gender did not have a significant influence on attitudes either. It did appear that age, employment status, and being employed in the tourism industry did have an effect on attitudes toward long term planning for tourism. Younger respondents and unemployed respondents were less likely to

believe that long term planning for tourism was important. Individuals who were employed in the tourism industry had more agreeable attitudes toward long term planning for tourism.

Overall, the results of the SUS-TAS questions reveal that Maine residents have highly favorable attitudes toward tourism in the State. The majority of respondents did not feel that tourism imposed serious negative social costs on their communities due to overcrowding or overuse of recreational resources. Respondents appeared to be somewhat unsure about the types of effects that tourism has on their local environment or whether or not tourism posed environmental concerns in their community. Even though some groups (younger aged and unemployed respondents) were less likely to feel that long-term planning for tourism was important, the great majority of respondents felt strongly that tourism planning is necessary. The majority also felt that tourism has a direct positive economic effect on their area and that it integrates well with other forms of industry. They also believed, overwhelmingly, that the tourism should source its labor and resources from within the community. Most also believed that visitors' satisfaction visitors to their area should be ensured and that all community members should be considered as stakeholders and given opportunity to voice their opinions about tourism related decisions.

3.15. Open-Ended Response Analysis

The survey instrument that was used, included three different open response questions where respondents could write in their specific thoughts, experiences and ideas. These three open ended questions included 1) open suggestions for activities/programs at Maine State Parks, 2) outdoor recreation resources that respondents believe are currently missing and they would like to see, and 3) final comments regarding outdoor recreation and tourism in Maine. Incorporating open ended responses into the survey also served to ensure that respondents could have the opportunity to express their ideas and concerns about items that were not specifically addressed in the survey. The result of this effort generated thousands of open ended comments that required careful analysis and discussion. In order to present these data most effectively, the research team examined these responses and removed comments that were either not relevant or valuable for planning purposes. The full list of open ended comments generated for this study are included in the appendix of the report for individual interpretation. In order to begin this process and understand the types of themes that emerged, NVivo 10 qualitative software was used to generate "word clouds" to illustrate the frequency that certain terms appeared within the comments. Next, data queries were conducted to understand the specific ideas that respondents had. Figure 20 (below) is an example of a word cloud that was generated to help prioritize open ended response analysis.

reliable. Finally, this approach made it efficient and effective for the research team to be responsive to recommendations for question development and data analysis options from the Maine Bureau of Parks and Lands in a timely manner.

One limitation of the study was that the great majority of respondents came from the recreationist segments. Although their responses are highly pertinent, this disparity in responses limited the ability to understand the needs and preferences of the general population.

Key conclusions based on survey results that may be relevant for SCORP planning purposes are listed below:

In terms of activities and settings:

1. Maine State Parks were the most popular type of outdoor recreation/conservation sites visited in Maine over the past two years.
2. The Maine Resident/Recreationist segment was found to be more active in 26 out of 32 possible options, but in many cases, by a very small margin. These activities did include hunting, fishing, camping (various forms), ATV riding, and snowmobiling.
3. There was a relatively small set of activities that the Maine General Population were more likely to pursue than the Maine Resident Recreationists, but these activities were primarily low skill/expense/easy entry activities including driving for pleasure/sightseeing, attending fairs and outdoor festivals and birdwatching. In most cases though, the percent of participation was comparable to the Maine Resident/Recreationists.
4. Both the Maine General Population and the Maine Resident Recreationists participate in outdoor recreation activities a similar amount of time over the course of a year; both as day outings and overnight outings.
5. High levels of demand exist for expanding a wide variety of non-motorized trail opportunities including easy trails in natural settings, educational/natural history trails, and moderate day hikes in nature.
6. Lower levels of demand exists for expanding a variety of motorized trails opportunities in Maine, but each of the segments most want to see community linking ATV and snowmobile trails expanded.

Differences in terms of demographics and travel behavior:

7. A very large portion of the non-resident recreationists and Maine resident-recreationists indicated that they had used a private seasonal residence while recreating in Maine over the past two years.
 - a. Maine Resident/Recreationists who had used a private seasonal residence sometime over the past two years exhibited a somewhat different profile than Maine resident non-users. They were more likely to visit land trust lands, recreate on privately owned land. They were also more likely to go ice fishing, motor boating, snowmobiling, and swimming.
 - b. Non-Resident/Recreationists who had used a private seasonal residence sometime over the past two years also exhibited a somewhat different profile than nonresident non-users. They were found to be more likely to visit local municipal parks and recreate on private land. They were also more likely to attend fairs and community events, and go motor boating and swimming.
8. Overall, there were relatively few important differences found when comparing responses based on geographic region. Exceptions to this finding were that the Southern Coast use private seasonal residences somewhat more often than in other regions of the state, residents of the Mid-Coast were most likely to visit Maine State Parks, and that Crown/Eastern and Maine Mountains regions were most likely to go snowmobiling. All of the SUS-TAS questions were highly variable geographically.
9. Age was found to have a significant influence on participants' responses in a number of significant ways. Younger respondents (18-34 years old) were more likely to favor and visit a wider variety of settings and recreation sites, prefer more primitive settings, participate in a wider array of outdoor activities, and participate more frequently than older participants (69-102).
10. Income was found to influence the types of constraints to outdoor recreation, the types of activities participants are willing to engage in, and potential programs of interest.
 - a. Respondents who reported having a low income (\$0-\$39,999/year) responded differently than higher income respondents on a number of items. Lower income respondents were more likely to report that they were constrained from participating in activities due to financial cost and were most likely to believe that the entrance fees to Maine State Parks were too expensive. The low income group expressed higher levels of interest in instructional programs and night sky events being offered or potentially offered at Maine State Parks.

- b. Respondents who reported having a high income (\$80,000/year or higher) were significantly more likely to participate in a wider variety of activities, visit locations such as Acadia National Park and land trust properties, and stay at Maine sporting camps, a private seasonal residence, or hotels/motels.
11. Level of Education was found to be a highly influential factor that is useful for explaining potential differences between respondents. This will be an extremely important variable to consider for planning purposes.
- a. Participants with relatively low levels of education (less than high school or high school diploma/GED) were more likely to participate in driving for pleasure, fishing, hunting, motor boating, riding an ATV and snowmobiling. The low education groups was overall highly interested in trail activities but were least interested in non-motorized trails.
 - b. Highly educated respondents (master's degree, doctoral degree, or professional degree) were dramatically different than those with a low level of education. The highly educated group was more likely to find a wider variety of outdoor settings very desirable than the other groups including backcountry trails, beaches, coastal trails, and community trails. They were also more likely to have visited Acadia National Park, Baxter State Park, local municipal parks, Maine Public Reserved Lands, Maine State Parks, land trust properties, and the White Mountain National forest at some point during the last two years than the other groups. The highly educated group was also most likely to participate in a wider variety of outdoor activities than other groups. A key insight into possible reasons why this group is most likely to visit the widest variety of places is that they also the most likely group to use the widest assortment of travel resources including the internet, magazine articles, the Maine Bureau of Parks and Lands website, Maine guidebooks, newspaper articles, and talking with staff who work at public recreation areas.

Regarding Maine State Parks:

12. The vast majority of both Maine Residents and Non-Residents have been to a Maine State Park at least once.
13. The majority of individuals who have visited a Maine State Park feel that the price of entrance fees was “just right”.
14. The vast majority Maine Residents and Non-Residents strongly agree that conserving Maine lands with recreational access should be a priority for the State of Maine.
15. Residents and Non-Residents are highly interested in a wide variety of educational opportunities that could be offered/are offered at Maine State Parks, such expanding opportunities for self-guided educational hikes (interpretive signage or printed informational brochures), instructional programs, and night sky events were mentioned.
16. Respondents who had not ever visited a Maine State Park most likely had not visited because they have other recreational priorities, they are too busy, they are too far away, not interested, or have a lack of knowledge of Maine State Parks.

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Appendices

Appendix A: IRB Approval.

APPLICATION FOR APPROVAL OF RESEARCH WITH HUMAN SUBJECTS
Protection of Human Subjects Review Board, 114 Alumni Hall, 581-1498

PRINCIPAL INVESTIGATOR: Dr. John J. Daigle
EMAIL: jdaigle@maine.edu TELEPHONE: 207-581-2850
CO-INVESTIGATOR(S): Dr. Sandra De Urioste-Stone
FACULTY SPONSOR (Required if PI is a student):
TITLE OF PROJECT: "How well are we serving the outdoor recreation public?"
START DATE: 3/30/2014 PI DEPARTMENT: School of Forest Resources
MAILING ADDRESS: 221 Nutting Hall Orono, ME 04469-5755
FUNDING AGENCY (if any): Maine Department of Agriculture, Conservation, and Forestry
STATUS OF PI: FACULTY/STAFF/GRADUATE/UNDERGRADUATE Faculty: (Daigle & De Urioste-Stone).

1. If PI is a student, is this research to be performed:

<input type="checkbox"/> for an honors (thesis/senior thesis/capstone)?	<input type="checkbox"/> for a master's thesis?
<input type="checkbox"/> for a doctoral dissertation?	<input type="checkbox"/> for a course project?
<input type="checkbox"/> other (specify) _____	
2. Does this application modify a previously approved project? No (Y/N). If yes, please give assigned number (if known) of previously approved project: _____
3. Is an expedited review requested? Yes (Y/N). _____

SIGNATURES: All procedures performed under the project will be conducted by individuals qualified and legally entitled to do so. No deviation from the approved protocol will be undertaken without prior approval of the IRB.

Faculty Sponsors are responsible for oversight of research conducted by their students. By signing this application page, the Faculty Sponsor ensures that he/she has read the application and that the conduct of such research will be in accordance with the University of Maine's Policies and Procedures for the Protection of Human Subjects of Research.

3/26/14
Date _____
Principal Investigator _____

Faculty Sponsor

Co-Investigator

Co-Investigator

FOR IRB USE ONLY Application # 2014-03-18 Date received 3/20/2014 Review (FIR): F
Expedited Category: _____

ACTION TAKEN:

- ☒ Judged Exempt; category 2. Modifications required? N (Y/N) Accepted (date) _____
 _____ Approved as submitted. Date of next review: by _____. Degree of Risk: _____
 _____ Approved pending modifications. Date of next review: by _____. Degree of Risk: _____
 _____ Modifications accepted (date): _____
 _____ Not approved. (See attached statement.)
 _____ Judged not research with human subjects

Date: 3/28/14 Chair's Signature: _____ Cynthia A. Erdley

12/2012

Appendix B. Online Questionnaire

Maine Outdoor Recreation Survey 2014

Information for Maine Outdoor Recreation and Tourism Survey Participants:

You are invited to participate in a research project being conducted by Dr. Sandra De Urioste-Stone, a faculty member in the School of Forest Resources at the University of Maine. The purpose of this research is to better understand Maine residents and out-of-state visitors' preferences, attitudes, and perceptions to help inform the 2014-2019 edition of the Maine State Comprehensive Outdoor Recreation Plan (SCORP), the guiding document for outdoor recreation planning and management for the state.

What you will be asked to do?

If you decide to participate, you will be asked to describe the types of outdoor recreation activities you participate in and where in Maine, your experiences at these recreation places, your attitudes and feelings towards tourism in your area, and some socio-demographic information about yourself. It will take 10-20 minutes to complete the survey.

Risks

Except for your time and inconvenience, there are no risks to you from participating in the study.

Benefits

This study will help us better understand different preferences for outdoor recreation activities and the places where individuals like to recreate in Maine. Your input will help us better plan and serve you in the future.

Compensation

At the end of the study, you will have the chance to be entered into a raffle to win one of 300 Maine State Park passes, one of 5 Maine State Park season passes, or a \$50 LL Bean gift certificate. If you wish to be entered into the raffle, please indicate so at the end of the survey when prompted. You may skip any questions and still enter the raffle. However, if you decide to stop the survey at any time and close the browser, you will not be able to enter the raffle. In no way will the email address provided be used for any other purpose than for contacting you if you are a winner. It will be stored separately from the data and all email addresses will be deleted once all winners have claimed their prizes.

Confidentiality

This study is anonymous. Information for the raffle will not be connected to your responses. Survey responses will only be published in summarized form, so your individual

responses will never be revealed or shared with anyone. The data collected in the survey will be stored for seven years in a secure file at the University of Maine and then destroyed.

Voluntary

Participation is voluntary. If you choose to take part in the study, you may stop at any time. You may skip any questions you do not wish to answer. Return of your survey implies consent to participate.

Contact Information

If you have any questions about this study, please contact me at (207) 581-2885; sandra.de@maine.edu; or 237 Nutting Hall, University of Maine, Orono Maine 04469-5755. If you have any questions about your rights as a research participant, please contact Gayle Jones, Assistant to the University of Maine's Protection of Human Subjects Review Board, at (207) 581-1498, or email gayle.jones@umit.maine.edu.

**Sincerely,
Dr. Sandra De Urioste-Stone
Assistant Professor**

Instructions

Please respond carefully to the questions in this survey. If you do not understand a question, it does not apply to you, or you do not feel comfortable answering a question you may leave them blank. We thank you greatly for participating in our study.

People recreate in a variety of different outdoor settings and activities in Maine. We would like to know what types of activities you participate in and what types of settings you like to visit in Maine.

1) Please rate your preference for visiting each of the following outdoor/natural settings found in Maine:

	Very desirable	Desirable	Neutral	Undesirable	Very undesirable
Backcountry trails	()	()	()	()	()
Beaches	()	()	()	()	()
Coastal trails	()	()	()	()	()
Cultural landmarks (lighthouses, forts, etc.)	()	()	()	()	()
Community trails	()	()	()	()	()
Farmlands	()	()	()	()	()
Forests	()	()	()	()	()
Lakes/Ponds	()	()	()	()	()
Mountains	()	()	()	()	()
Playgrounds	()	()	()	()	()
Rivers	()	()	()	()	()

2) Please indicate all of the following outdoor recreation/conservation sites that you have visited in Maine, during the last two years. (Please select *all that apply*)

- ☐ Acadia National Park
- ☐ Baxter State Park
- ☐ Farms and other agricultural sites that are open to the public for visitation
- ☐ Local municipal parks and open spaces
- ☐ Maine Public Reserved Lands (For Example: Bigelow Preserve, Deboullie, Donnell Pond, etc.)
- ☐ Maine State Parks and State Historic Sites
- ☐ Private land open for recreation
- ☐ Properties owned by land trusts
- ☐ U.S. Fish and Wildlife Refuges
- ☐ White Mountain National Forest

3) Which of the following outdoor recreation activities have you participated in while recreating in Maine during the last two years. (Please select all that apply.)

- ☐ Attending fairs/community events
- ☐ Bicycling (including mountain biking)
- ☐ Bird watching
- ☐ Canoeing
- ☐ Collecting wild plants
- ☐ Cross-country skiing
- ☐ Driving for pleasure/sightseeing
- ☐ Downhill skiing
- ☐ Enjoying nature

Question # 3 Continued...

☐ Fishing on open water

☐ Golf

☐ Hiking

☐ Hunting

☐ Ice fishing

☐ Kayaking on freshwater

☐ Motor boating

☐ Mountain climbing

☐ Nature photography

☐ Outdoor festivals

☐ Picnicking

☐ Riding an ATV

☐ River rafting

☐ Sailing

☐ Sea Kayaking

☐ Snowboarding

☐ Snowmobiling

☐ Snowshoeing

☐ Sunbathing/tanning

☐ Swimming

☐ Viewing wildlife

☐ Visiting historic sites

☐ Other: _____

4) Have you paid a guide to bring you out for any of these activities that you have participated in while recreating in Maine during the past two years?

☐ Yes

☐ No

5) Please rate the average frequency that you pursue outdoor recreation activities as day outings and as overnight outings over the past two years. (Please select one option per type of outing)

	Daily	Every few days	Weekly	Every few weeks	Monthly	A few times during the year	Once during the year	Every few years	Never
As day outings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
As overnight outings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6) Please select what types of overnight accommodations you have used when pursuing outdoor recreation activities in Maine over the past two years. (Please select all that apply)

☐ Tent camping in a remote, backcountry setting

☐ Tent camping in a campground accessed by a vehicle

☐ Tent camping at a camping area with a fee

☐ RV camping with no water hookup or electricity available

☐ RV camping with a water hookup and electricity available

☐ A rustic cabin or a yurt

☐ Commercial Maine sporting camp or lodge

Question # 6 Continued...

☐ Private seasonal residence (lake house, etc.)

☐ Bed and Breakfast

☐ Hotel/motel

☐ Luxury accommodations (high-end resort or hotel)

☐ Other: _____

7) Please rate the average amount of time you pursue outdoor recreation activities in Maine during each of the following seasons. (Based on the past two years.)

	Daily	Every few days	Weekly	Every few weeks	Monthly	A few times during the year	Once during the year	Every few years	Never
Winter	()	()	()	()	()	()	()	()	()
Spring	()	()	()	()	()	()	()	()	()
Summer	()	()	()	()	()	()	()	()	()
Autumn	()	()	()	()	()	()	()	()	()

8) Please rate to what extent each of the following factors limits your pursuit of outdoor recreation activities. (Over the past two years)

	Not at all	To a small extent	To a moderate extent	To a large extent	To a very large extent
Difficulty of being able to access favorite places	()	()	()	()	()

Question # 8 Continued...

Family status (Need to care for young or elderly members of your family)	()	()	()	()	()
Financial cost	()	()	()	()	()
Lack of interest	()	()	()	()	()
Lack of knowledge	()	()	()	()	()
Lack of skills	()	()	()	()	()
Lack of transportation	()	()	()	()	()
Not having companions to recreate with	()	()	()	()	()
Perceptions of danger/risk	()	()	()	()	()
Physical difficulty/strain	()	()	()	()	()
Too busy/ other priorities	()	()	()	()	()
Unable to get time off from work/school	()	()	()	()	()
The weather	()	()	()	()	()

9) During the past two years, what was the *maximum distance* that you traveled, *one way*, for a particular outdoor recreation outing in Maine?

_____ Miles

10) During the past two years, what was the *shortest distance* that you traveled, *one way*, to pursue a particular outdoor recreation outing in Maine?

_____ Miles

11) Please select the Maine County where you most often engaged in outdoor recreation activities during the past two years

☐ Androscoggin

☐ Aroostook

☐ Cumberland

☐ Franklin

☐ Hancock

☐ Kennebec

☐ Knox

☐ Lincoln

☐ Oxford

☐ Penobscot

☐ Piscataquis

☐ Sagadahoc

☐ Somerset

☐ Waldo

☐ Washington

☐ York

☐ Not sure

12) Please select the Maine County where you engaged in outdoor recreation activities second most often, during the past two years.

- ☐ Androscoggin
- ☐ Aroostook
- ☐ Cumberland
- ☐ Franklin
- ☐ Hancock
- ☐ Kennebec
- ☐ Knox
- ☐ Lincoln
- ☐ Oxford
- ☐ Penobscot
- ☐ Piscataquis
- ☐ Sagadahoc
- ☐ Somerset
- ☐ Waldo
- ☐ Washington
- ☐ York
- ☐ Not sure

13) Please indicate your level of activity on *non-motorized trails*, *motorized trails*, and *multi-use trails* in Maine, over the last two years.

-Non-motorized trails only support opportunities for hiking, biking, cross country skiing, and other similar activities.

-Motorized trails support opportunities for ATV, snowmobile, and other motorized uses.

-Multi-use trails, such as shared-use rail trails, support opportunities for motorized uses simultaneously with walking, biking, cross country skiing, and other non-motorized activities.

Question #13 Continued...

	Daily	Every few days	Weekly	Every few weeks	Monthly	A few times during the year	Once during the year	Every few years	Never
Non-motorized trails	()	()	()	()	()	()	()	()	()
Motorized trails	()	()	()	()	()	()	()	()	()
Multi-use trails	()	()	()	()	()	()	()	()	()

14) Please rate how much you feel opportunities for each of the following non-motorized trail types need to be expanded in Maine.

	Very needed	Needed	Neutral	Not needed	Definitely not needed
Easy to moderate off-road bicycling	()	()	()	()	()
Easy trails in natural settings	()	()	()	()	()
Groomed cross country ski trails	()	()	()	()	()
Intermediate to advanced off-road bicycling in a natural setting	()	()	()	()	()
Longer, full day hikes in remote settings	()	()	()	()	()
Moderate day hikes in natural settings	()	()	()	()	()
Multi-day backpacking in remote settings	()	()	()	()	()
Paddling on a water route mainly used only by other paddlers	()	()	()	()	()
Primitive, ungroomed cross country ski trails	()	()	()	()	()
Trails accessible to persons with disabilities	()	()	()	()	()

Question # 14 Continued...

Trails that have displayed information about the natural history or other educational information about an area.	()	()	()	()	()
Trails that are well-suited for snowshoeing	()	()	()	()	()

15) Please rate how much you feel opportunities for each of the following motorized trail types need to be expanded in Maine.

	Very needed	Needed	Neutral	Not needed	Definitely not needed
Long, interconnected ATV trails linking communities	()	()	()	()	()
Remote, destination, or vista ATV trails	()	()	()	()	()
ATV trails for riding close to home.	()	()	()	()	()
ATV trails with challenging terrain	()	()	()	()	()
ATV trails, such as multi-use rail trails, that provide higher maintenance standards and that share use with non-motorized uses	()	()	()	()	()
Long, interconnected snowmobile trails linking communities	()	()	()	()	()
Remote destination, or vista snowmobile trails	()	()	()	()	()
Snowmobile trails for riding close to home	()	()	()	()	()
Groomed snowmobile trails that share use with non-motorized uses	()	()	()	()	()
Snowmobile access for off-trail riding, ice fishing, and other non-trail snowmobile use	()	()	()	()	()

16) How do you typically seek out information about outdoor recreation opportunities and destinations in Maine? (Please select all that apply)

- ☐ Area chambers of commerce
- ☐ Asking local people about their area
- ☐ Family/friends
- ☐ Highway/other visitor information centers
- ☐ Internet searches
- ☐ Magazine articles about Maine
- ☐ Maine Atlas/ Gazetteer or similar travel maps/guides
- ☐ Maine Bureau of Parks and Lands website
- ☐ Maine guidebooks
- ☐ Maine Office of Tourism website
- ☐ Newspaper articles or listed events
- ☐ Road signs
- ☐ Staff who work at public recreation areas (either in person or other mode)
- ☐ Staff who work at private campgrounds (either in person or another mode)
- ☐ Staff at local retail businesses
- ☐ Way finding and exploring on your own
- ☐ Other: _____

We would like to now ask you some questions about your experience visiting Maine State Parks.

17) Have you ever visited a Maine State Park? (Not including Baxter State Park)

- ☐ Yes
- ☐ No

18) When visiting a typical Maine State Park, what types of amenities *do you most appreciate and/or would like to see offered?* (Select all that apply)

☐ Cabins or yurts

☐ Equipment rentals

☐ Expanded group facilities.

☐ Flush toilets

☐ Free internet access via Wi-Fi

☐ Hand-carry boat launches

☐ Playgrounds

☐ Showers

☐ Trailered boat launches

☐ Water and electricity hookups for camping

☐ Other: _____

19) If you have visited a Maine State Park *within the last two years*, how reasonable did you think the entrance fee that you paid was?

☐ Very Expensive ☐ Expensive ☐ Just right ☐ Inexpensive ☐ Very inexpensive

20) Have you purchased a Maine State Parks *Season Pass* within the *past two years*?

☐ Yes

☐ No

21) Please rate the relative amount of time you visited Maine State Parks during each of the following seasons, during the past two years.

	Daily	Every few days	Weekly	Every few weeks	Monthly	A few times during the year	Once during the year	Every few years	Never
Winter	()	()	()	()	()	()	()	()	()
Spring	()	()	()	()	()	()	()	()	()
Summer	()	()	()	()	()	()	()	()	()
Autumn	()	()	()	()	()	()	()	()	()

22) Please rate how much you are interested in participating in each of the following types of event and program opportunities offered or potentially could be offered at Maine State Parks.

	Strongly interested	Interested	Neutral	Uninterested	Strongly uninterested
Instructional programs that teach participants new skills (animal tracking, bird identification, plant identification, etc.)	()	()	()	()	()
Guided nature walks	()	()	()	()	()
Kids' programs and family oriented events (arts and crafts, family camping, etc.)	()	()	()	()	()
Adaptive recreation events for individuals with disabilities	()	()	()	()	()
Night sky observation events	()	()	()	()	()
Outdoor sporting events such as fishing derbies	()	()	()	()	()

Question # 22 Continued...

Reenactments of historical events in Maine	()	()	()	()	()
Self-guided educational hikes (with educational signs and brochures).	()	()	()	()	()
"Volunteer in the park" events (park cleanup, trail repairs, etc.)	()	()	()	()	()
Swimming lessons	()	()	()	()	()
School group programs	()	()	()	()	()

23) Please describe any suggestion you may have for other programs or activities that you would like to see offered at Maine State Parks.

24) Please indicate any of the following reasons you have not visited a Maine State Park. (Please select all that apply.)

[] Too expensive

[] Too far away

[] Not interested

[] Family status (need to care for young or elderly family members)

[] Physical difficulties/ strain

[] Too busy

[] I have other recreation priorities

[] Lack of knowledge of Maine State Parks

[] Too many rules and restrictions

[] Other: _____

25) Please rate how much you feel that conserving Maine land with recreational access should be a priority for the State of Maine.

☐ Strongly agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree

26) Please comment on any other types of outdoor recreation resources missing in Maine that you would like to see.

27) Please indicate your current residential status:*

- ☐ Full time resident of the State of Maine
- ☐ Seasonal resident of the State of Maine. (At least 6 months of the year.)
- ☐ Not a resident of the State of Maine

We are looking for ways to improve the quality of the tourism opportunities offered throughout our state. Maine residents have always been crucial to the success of tourism in our state and we are seeking your input on how to improve our tourism resources.

28) Section I:

Please specify your feelings about each of the following statements pertaining to tourism in your area/community.

	Strongly agree	Agree	Undecided	Disagree	Strongly Disagree
"Tourism development needs well-coordinated planning"	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
"When planning for tourism, we can't be shortsighted"	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Question # 28 Continued...

"Tourists in my community disrupt my quality of life"	()	()	()	()	()
"Successful management of tourism requires advanced planning"	()	()	()	()	()
"My community is overcrowded because of tourism"	()	()	()	()	()
"We need to take a long-term view when planning for tourism development"	()	()	()	()	()
"My community's diversity of nature is valued and protected"	()	()	()	()	()
"My community's recreational resources are overused by tourists"	()	()	()	()	()
"Tourism development in my community always protects wildlife and natural habitats"	()	()	()	()	()
"My community's natural environment is being protected now and for the future"	()	()	()	()	()
"Tourism development in my community promotes positive environmental ethics"	()	()	()	()	()
"Tourism in my community is developed in harmony with the natural environment"	()	()	()	()	()
"Tourism is growing too fast in my community"	()	()	()	()	()

29) Section II:

Please specify your feelings about each of the following statements pertaining to tourism in your area/community.

	Strongly agree	Agree	Undecided	Disagree	Strongly Disagree
"Tourism is a strong economic contributor to my community"	()	()	()	()	()

Question # 29 Continued...

"Tourism benefits other than just tourism related industries in my community"	()	()	()	()	()
"Tourism brings new income to my community"	()	()	()	()	()
"Tourism generates substantial tax revenue for my local government"	()	()	()	()	()
"Tourism businesses in my area should try to hire most of their employees from within the community"	()	()	()	()	()
"The tourism industry should try to purchase their goods and services within the local community"	()	()	()	()	()
"The tourism industry in my area should economically contribute to community improvement efforts"	()	()	()	()	()
"Tourism businesses in my community must monitor visitors' satisfaction"	()	()	()	()	()
"Tourism businesses in my area should ensure good quality tourism experiences and opportunities for visitors"	()	()	()	()	()
"It is the responsibility of tourism businesses to meet visitors' needs"	()	()	()	()	()
"Community attractiveness is a core element of ecological 'appeal' for visitors to my area"	()	()	()	()	()
"Tourism decisions in my area must be made by all members in the community regardless of a person's background"	()	()	()	()	()
"Full participation by everyone in my community regarding tourism decisions is a must for successful tourism development"	()	()	()	()	()
"Sometimes it is acceptable to exclude residents in my community from tourism development decisions"	()	()	()	()	()

This is the last section! We would just like to ask you a few short questions about your background. Remember, all of your responses are strictly confidential.

30)

If you are a resident of the *United States*, please enter the 5-digit zip code for where you currently live.

OR

If you are a resident of a *foreign country*, please write the name of the country for where you live.

31) Are you male or female?

☐ Male

☐ Female

32) What is your age?

____ Years old

33) What is the highest level of education that you have completed?

☐ Less than High School

☐ High School or GED

☐ Some College

☐ Two Year College Degree (Associates)

☐ Four-Year College Degree (BA, BS)

☐ Master's Degree

☐ Doctoral Degree

☐ Professional Degree (MD, MJ, etc.)

34) Please indicate how many years you have continuously lived as a full time resident of Maine.

_____ Years

35) Please indicate how many years you have been a seasonal resident of the State of Maine.

_____ Years

36) Which of the following best describes your current employment status?

☐ Full time employed

☐ Full time student

☐ Part time employed

☐ Retired

☐ Unemployed

37) Please indicate the status of you and your household members' work in Maine's tourism industry. (Please select all that apply.)

☐ I work in Maine's tourism industry seasonally (6 months or less/year).

☐ I work in Maine's tourism industry year round.

☐ A member of my household, other than myself, works in Maine's tourism industry seasonally (6 months or less/year).

☐ A member of my household, other than myself, works in Maine's tourism industry year round.

☐ Neither a household member or I work in Maine's tourism industry.

38) Please indicate your approximate household annual income.

☐ \$0-\$9,999

☐ \$10,000-\$19,999

Question # 38 Continued...

- ☐ \$20,000-\$29,999
- ☐ \$30,000-\$39,999
- ☐ \$40,000-\$49,999
- ☐ \$50,000-\$59,999
- ☐ \$60,000-\$69,999
- ☐ \$70,000-\$79,999
- ☐ \$80,000-\$89,999
- ☐ \$90,000-\$99,999
- ☐ \$100,000-\$109,999
- ☐ \$110,000 or Greater

39) What is your race?

- ☐ African-American
- ☐ Asian-Pacific Islander
- ☐ Hispanic
- ☐ Native American
- ☐ White
- ☐ Other: _____

40) Please provide any final comments you may have about outdoor recreation or tourism in Maine.

Your participation is greatly appreciated

Appendix C: Wetland Component

Introduction

Maine has an abundance and diversity of wetlands unequalled in the Northeastern U.S. One quarter of the state's land area is wetlands, four times the wetland area of the other five New England States combined. Over five million acres of Maine's wetlands are freshwater types (wooded swamps, shrub swamps, bogs, freshwater meadows, freshwater marshes and floodplains), while only 157,500 acres are tidal types (tidal flats, salt marsh, brackish marsh, aquatic beds, beach bars and reefs).

According to Dahl (1990) between 1780 and 1980, an estimated 20% of Maine's wetlands were lost. Human endeavors like building and road development, dam and impoundment building, agriculture and timber harvesting, and other activities are prime contributors to these wetland losses.

Wetlands are valuable not only for their beauty and the recreation opportunities they support, but also for critically important functions they perform in our environment, including water storage, flood conveyance, groundwater recharge and discharge, shoreline erosion control and water quality improvement. They are the source of timber resources highly valuable to Maine's forest products industry, and perhaps most important, wetlands provide habitat vital to fish and wildlife, including many rare and endangered species.

The identification of important wetlands and their protection by regulation and acquisition has been ongoing for many years by government and private organizations. Since passage of the Emergency Wetlands Resources Act of 1986, State Comprehensive Outdoor Recreation Plans (SCORPs) have been required to address the acquisition of wetlands with stateside Land and Water Conservation Fund (LWCF) dollars. Specifically, federal SCORP guidelines require the inclusion of a wetlands priority component consistent with Section 303 of the Emergency Wetlands Resources Act of 1986. At a minimum this component must:

- *be consistent with the National Wetlands Priority Conservation Plan (NWPCP) prepared by the US Fish and Wildlife Service;*
- *provide evidence of consultation with the state agency responsible for fish and wildlife resources;*
- *and contain a listing of those wetland types that should receive priority for acquisition.*

Wetland Conservation Planning

The **Emergency Wetlands Resources Act of 1986** affirmed that both federal-side and stateside LWCF money could be used to acquire wetlands. It required the Secretary of the Interior to prepare a ***National Wetlands Priority Conservation Plan*** that would specify the types of wetlands and interests in wetlands that should be given priority for acquisition with LWCF dollars so that efforts would focus on the country's more important, scarce, and vulnerable wetlands. Federal agency wetland acquisitions with LWCF dollars (primarily by the US Fish and Wildlife Service) must be consistent with the plan, and wetland acquisitions by states with stateside LWCF dollars must be consistent with a SCORP that is consistent with the plan.

The NWPCP was prepared by the US Fish and Wildlife Service and published in 1989. To be eligible for purchase with LWCF dollars, a wetland must meet the following minimum criteria specified in the plan:

1. The wetland site must include predominantly (50% or more) wetland types that are rare or declining in an ecoregion.
2. The wetland must be threatened with loss or degradation. A site would be considered threatened if more than 10% of its values and functions are likely to be destroyed or adversely affected by direct, indirect, or cumulative impacts over the next 10 years considering the array of possible threats to the site and the level of threat afforded by existing regulations and owners' intentions. Obvious threats include draining and filling, building development, mining, transportation projects, vegetation removal, etc.
3. The wetland site must offer documented public values in at least two of the following areas: wildlife, commercial and sport fisheries, surface and groundwater quality and quantity and flood control, outdoor recreation, and other values, such as rare/unusual species or features, educational/research value, or historical/archaeological features.

The Maine Wetlands Conservation Priority Plan: An Addendum to the State

Comprehensive Outdoor Recreation Plan (1988) was a joint effort of the Maine Bureau of Parks and Recreation, the Maine State Planning Office, and the Wetlands Subcommittee of the Land and Water Resources Council, which coordinated natural resources policy among state agencies. The Addendum affirmed the three primary criteria of the national plan and identified the following Maine LWCF wetland acquisition priorities based on these:

1. **rare or declining wetland types:**
 - palustrine emergent (fresh marshes)
 - estuarine intertidal (coastal marshes and mudflats)

- some palustrine forested wetland complexes in York County and southern coastal areas including Hemlock-Hardwood Pocket Swamps (Critically Imperiled) and Significant Vernal Pools as recently included in Significant Habitat designations.
- Wetlands supporting habitat for rare (S1-S3) natural community types (for details on S1-S3 natural community types, see **table 1 on page 8**).
- 2. **wetlands threatened with loss or degradation:**
 - coastal marshes and undeveloped low-lying uplands in southern and mid-coast areas where population increases and second home construction is placing pressure on these areas and limited undeveloped lands remain for climate change induced inland migration of these wetland types;
 - headwater streams, and seeps in the coastal plain;
 - vernal pool complexes and small isolated habitat stepping stone wetlands in southern Maine that support rare herpetiles;
 - large peatlands, if peat mining becomes prevalent in Maine;
 - coastal intertidal areas in regions of high population growth;
 - critical edge habitat in coastal and other wetlands; and
- 3. **high value and/or function wetlands, determined by on-site analysis. Under this criterion, the Addendum recommended particular attention to the following in Maine:**
 - high value and multi-value wetlands;
 - habitats for rare and endangered plant and/or animal species;
 - habitat for rare, threatened, and endangered plant and animals, and rare and exemplary natural communities in the state and for which there are inadequate representatives under protected status;
 - exemplary occurrences of common wetland types that are not receiving adequate protection;
 - habitats of state significance for fishery and wildlife resources, and that may satisfy the goals and guidelines of international treaties such as the North American Migratory Waterfowl Plan;
 - wetlands with important hydrological functions of state or regional significance; and
 - culturally significant wetlands, such as those with recreational or educational potential and those that can accommodate high visitor use.

The **1993 Maine SCORP** recommended additional wetland acquisition criteria for stateside LWCF dollars that would target important wetlands not emphasized by other protection programs. These additional criteria required that a wetland proposed for acquisition:

- offer public access, including access to associated surface water;
- be located near population centers or in areas with high rates of growth;
- be wetland types that are not priorities for protection through other programs;

- contain public values and benefits that cannot be maintained except through acquisition, especially to gain access;
- be wetlands of local importance because they have been identified as a protection priority in local comprehensive, open space, or recreation plans; or because they provide public access to locally important outdoor recreation opportunities; or are key in protecting locally important habitat; and provide opportunities for nature education for a variety of age groups.

Beginning with Habitat

Beginning with Habitat is a habitat-based landscape approach to assessing wildlife and plant conservation needs and opportunities with a goal to maintain sufficient habitat to support all native plant and animal species currently breeding in Maine by providing each Maine town with a collection of maps and accompanying information depicting and describing various habitats of statewide and national significance found in the town. This data is coupled with suggestions for tools that can be implemented at the local level to advance local and regional conservation planning that better balances future growth with a functional network of habitat types capable of maintaining ecological services over the long term. The program is a cooperative effort of the Maine Department of Inland Fisheries and Wildlife, Maine Department of Conservation Natural Areas Program, Maine Audubon Society, Maine State Planning Office, United States Fish and Wildlife Service, Maine Cooperative Fish and Wildlife Research Unit, Southern Maine Regional Planning Commission, and Wells National Estuarine Research Reserve.

After reviewing high value plant and animal habitats – of which wetlands are key components - and undeveloped habitat blocks, biologists from the Maine Department of Conservation Natural Areas Program and Department of Inland Fisheries and Wildlife identified landscape-scale areas meriting special conservation attention - including acquisition. These Focus Areas of Statewide Ecological Significance are built around the locations of rare plants, animals, and natural communities, high quality common natural communities, significant wildlife habitats, and their intersection with large blocks of undeveloped habitat, and are designed to bring attention to areas with concentrations plant and animal habitats values. The important habitat resources identified in a community are recommended as a foundation for resource protection and open space planning that may be part of town comprehensive planning and local land trust conservation efforts. *Beginning with Habitat* Focus Areas of Statewide Ecological Significance are recommended as targets for additional protection efforts by towns, local land trusts and other agencies and organizations.

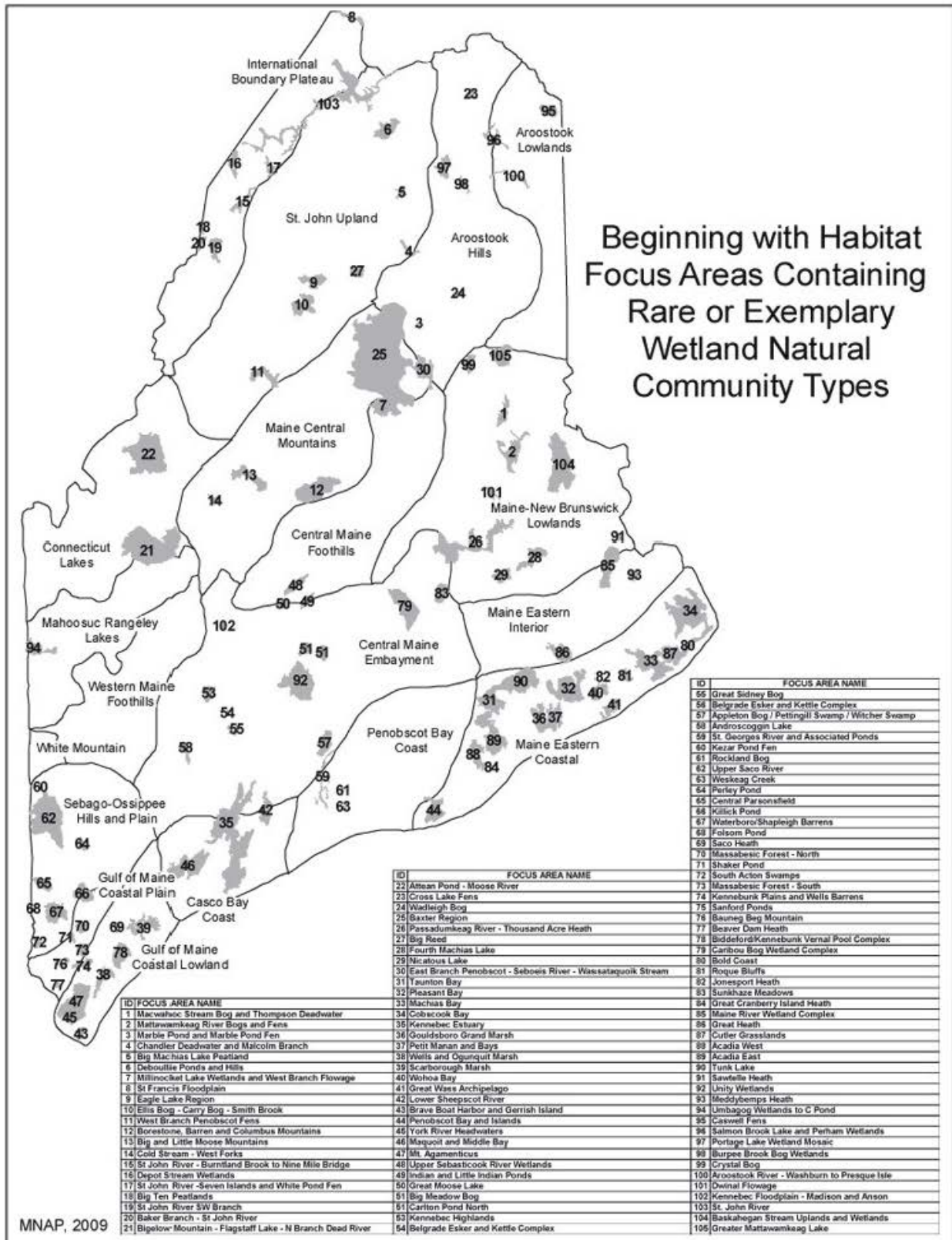
Beginning with Habitat Focus Areas of Statewide Ecological Significance, including important wetlands, have been designated statewide. A map of focus areas of statewide

significance with rare or exemplary wetland natural community types and lists of Beginning with Habitat Focus Areas of Statewide Ecological Significance are shared in this appendix document.

Current Wetland Acquisition in Maine

Current wetland acquisition in Maine is driven largely by the program objectives of agencies and organizations concerned with fish, wildlife, and plant habitats rather than by a single overarching wetland protection strategy, and wetlands high in habitat values account for much of the wetland acreage that has been acquired for protection in Maine.

Figure 1: Beginning with Habitat Focus Areas with Rare or Exemplary Wetland Types (Source: Maine Natural Areas Program, 2009)



The U.S. Fish and Wildlife Service's Gulf of Maine Program, the Maine Dept. of Inland Fisheries and Wildlife, The Nature Conservancy--Maine Chapter, Maine Coast Heritage Trust, the Land for Maine's Future Program, Ducks Unlimited, The Trust for Public Land, local land trusts, and landowners come together periodically as the **Maine Wetland Protection Coalition** to identify protection priorities and coordinate large grant application efforts that result in important wetland acquisitions. The Maine Wetland Protection Coalition's goal is to permanently protect high value wetland habitat in Maine. Winter and Fefer (2007) outline the coalition's approach below:

- Prioritize statewide wetland protection projects based on habitat data, willing landowners, and grant requirements;
- Coordinate potential wetland protection projects with all conservation partners to avoid unproductive competition and maximize its use of staff time and funding sources;
- Identify projects where the expertise of Coalition members can support local partners in developing and implementing well-conceived and nationally competitive grants;
- Conduct outreach to ensure strong support for wetland conservation projects in Maine and nationally; and
- Ensure that projects are coordinated with the Maine Department of Inland Fisheries and Wildlife, the lead Coalition agency, and other appropriate partners.

Recreation Considerations

Each State Comprehensive Outdoor Recreation Plan is required to consider outdoor recreation opportunities associated with its wetlands resources for meeting the State's public outdoor recreation needs. In this regard, it is worth highlighting a few key services and opportunities provided by wetlands.

- Wetlands play a key habitat role in relation to recreational hunting and fishing (according to the 2006 *National Survey of Fishing, Hunting, and Wildlife-Associated Recreation*, produced by the United States Fish & Wildlife Service, there are a combined 366,000 resident hunters/anglers in Maine).
- Wetlands, as mentioned above, have vital wildlife habitat functions. As such, they are also natural sites for wildlife watching and photography. Developing additional wildlife watching facilities, including interpretive elements exploring the natural history of wetlands, should be a considered a recreation goal associated with wetlands. This is especially noteworthy due to the strong growth in the participation levels for wildlife watching activities.
- Some wetlands, such as Maine's peat bogs, are nationally unique environments and, when properly managed, can add to the overall diversity of landscapes residents and visitors alike can explore and enjoy.

Recommendations

There are a number of reports and planning efforts associated with wetlands, both nationally and in Maine. However, Beginning with Habitat (BwH) has become a leading force in the identification of focus areas for conservation, including wetlands, and may be best positioned to guide any potential wetland acquisitions associated with LWCF funds. Given BwH's planning role regarding both wetlands of statewide significance and wetlands with more local (community) importance, it is recommended that BwH guidance, especially in the form of focus areas identified as having rare or exemplary wetland natural community types (see Figure 1), take priority for wetland acquisition.

Qualification Note: NWPCP Standards

As mentioned before, the following conditions (1-3) must be met to use the Land and Water Conservation Fund to purchase wetlands. Listed below each condition are details indicating wetland characteristics and/or locations meeting the condition.

1. rare or declining wetland types:

- Wetlands supporting habitat for rare (S1-S3) natural community types

2. wetlands threatened with loss or degradation:

- coastal marshes and undeveloped low-lying uplands in southern and mid-coast areas where population increases and second home construction is placing pressure on these areas and limited undeveloped lands remain for climate change induced inland migration of these wetland types;
- headwater streams, and seeps in the coastal plain;
- vernal pool complexes and small isolated habitat stepping stone wetlands in southern Maine that support rare herpetiles;
- large peatlands, if peat mining becomes prevalent in Maine;
- coastal intertidal areas in regions of high population growth;
- critical edge habitat in coastal and other wetlands; and

3. high value and/or function wetlands, determined by on-site analysis. particular attention should be given to the following in Maine:

- high value and multi-value wetlands;
- habitats for rare and endangered plant and/or animal species;
- habitat for rare, threatened, and endangered plant and animals, and rare and exemplary natural communities in the state and for which there are inadequate representatives under protected status;
- exemplary occurrences of common wetland types that are not receiving adequate protection;
- habitats of state significance for fishery and wildlife resources, and that may satisfy the goals and guidelines of international treaties such as the North American Migratory Waterfowl Plan;
- wetlands with important hydrological functions of state or regional significance; and
- Recreationally and/or culturally significant wetlands, such as those with educational

potential, scenic attributes, hunting and fishing values, and those that can sustainably accommodate high visitor use.

Note: Wetland acquisitions should also include an adequate upland buffer to ensure off-site impacts to wetlands are minimized.

Maine Natural Areas Program Rare and Exemplary Wetland Natural Community Types in Maine

- S1 Critically imperiled in Maine because of extreme rarity (five or fewer occurrences or very few remaining individuals or acres) or because some aspect of its biology makes it especially vulnerable to extirpation from the State of Maine.
- S2 Imperiled in Maine because of rarity (6-20 occurrences or few remaining individuals or acres) or because of other factors making it vulnerable to further decline.
- S3 Rare in Maine (20-100 occurrences).
- S4 Apparently secure in Maine.
- S5 Demonstrably secure in Maine.

Alder Floodplain	S4
Bog Moss Lawn	S4
Bulrush Bed	S4
Cedar - Spruce Seepage Forest	S4
Mixed Graminoid - Forb Saltmarsh	S4
Mixed Tall Sedge Fen	S4
Mountain Holly - Alder Woodland Fen	S4
Northern White Cedar Swamp	S4
Northern White Cedar Woodland Fen	S4
Red Maple - Sensitive Fern Swamp	S4
Red Maple Wooded Fen	S4
Sheep Laurel Dwarf Shrub Bog	S4
Spruce - Fir - Cinnamon Fern Forest	S4
Spruce - Larch Wooded Bog	S4
Sweetgale Mixed Shrub Fen	S4
Tussock Sedge Meadow	S4
Alder Shrub Thicket	S5
Cattail Marsh	S5
Mixed Graminoid - Shrub Marsh	S5
Pickerelweed - Macrophyte Aquatic Bed	S5
Pipewort - Water Lobelia Aquatic Bed	S5
Water-lily - Macrophyte Aquatic Bed	S5

Beginning with Habitat Focus Areas of Statewide Ecological Significance

Androscoggin	Androscoggin Lake
Aroostook	Aroostook River - Washburn to Presque Isle
Aroostook	Big Machias Lake Peatland
Aroostook	Black Brook - Birch River Headwaters
Aroostook	Burpee Brook Bog Wetlands
Aroostook	Caswell Fens
Aroostook	Chandler Deadwater and Malcolm Branch
Aroostook	Cross Lake Fens
Aroostook	Crystal Bog
Aroostook	Deboullie Ponds and Hills
Aroostook	Depot Stream Wetlands
Aroostook	Greater Mattawamkeag Lake
Aroostook	Macwahoc Stream Bog and Thompson Deadwater
Aroostook	Mattawamkeag River Bogs and Fens
Aroostook	Portage Lake Wetland Mosaic
Aroostook	Salmon Brook Lake and Perham Wetlands
Aroostook	Squa Pan Mountain
Aroostook	St. Francis Floodplain
Aroostook	St. John River
Aroostook	St. John River - Burntland Brook to Nine Mile Bridge
Aroostook	St. John River - Seven Islands and White Pond Fen
Aroostook	Wadleigh Bog
Cumberland	Holt Pond
Cumberland	Jugtown Plains
Cumberland	Kennebec Estuary
Cumberland	Maquoit and Middle Bay
Cumberland	Otter Pond
Cumberland	Perley Pond
Cumberland	Scarborough Marsh
Cumberland	Upper Saco River
Franklin	Bigelow Mountain - Flagstaff Lake - North Branch Dead River
Franklin	Kennebec Highlands
Franklin	Mount Abraham - Saddleback - Crocker Mountains
Franklin	Tumbledown Mountain to Mount Blue
Hancock	Acadia East and West
Hancock	Bagaduce River
Hancock	Bald Bluff Mountain
Hancock	Fourth Machias Lake
Hancock	Gouldsboro Grand Marsh
Hancock	Great Cranberry Island Heath
Hancock	Nicatous Lake
Hancock	Passadumkeag River - Thousand Acre Heath
Hancock	Penobscot Bay and Islands
Hancock	Schoodic Peninsula
Hancock	Taunton Bay
Hancock	Tunk Lake

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Hancock	Upper Union River
Kennebec	Androscoggin Lake
Kennebec	Belgrade Esker and Kettle Complex
Kennebec	Cobbossee - Annabessacook South
Kennebec	Great Sidney Bog
Kennebec	Kennebec Estuary
Kennebec	Kennebec Highlands
Kennebec	Kennebec River at Sidney-Vassalboro
Kennebec	Messalonskee Lake Marsh
Kennebec	Spectacle - Tolman Ponds
Kennebec	Unity Wetlands
Knox	Appleton Bog - Pettingill Stream - Witcher Swamp
Knox	Camden Hills
Knox	Lower St. George River
Knox	Penobscot Bay and Islands
Knox	Ragged Mountain - Bald Mountain
Knox	Rockland Bog
Knox	St. George River and Associated Ponds
Knox	Upper Sheepscot River
Knox	Weskeag Creek
Lincoln	Kennebec Estuary
Lincoln	Lower Sheepscot River
Lincoln	Salt Bay
Lincoln	St. Georges River and Associated Ponds
Lincoln	Upper Sheepscot River
Oxford	Ellis River
Oxford	Jugtown Plains
Oxford	Kezar Pond Fen
Oxford	Mahoosucs
Oxford	Porter Hills
Oxford	Twin Peaks Region
Oxford	Umbagog Wetlands to C Pond
Oxford	Upper Saco River
Oxford	White Mountains
Oxford	Whitecap Mountain - Rumford
Penobscot	Caribou Bog Wetland Complex
Penobscot	Carlton Pond North
Penobscot	Indian and Little Indian Ponds
Penobscot	Sunkhaze Meadows
Piscataquis	Baxter Region
Piscataquis	Big and Little Moose Mountains
Piscataquis	Big Reed
Piscataquis	Borestone, Barren and Columbus Mountains
Piscataquis	Eagle Lake Region
Piscataquis	Ellis Bog - Carry Bog - Smith Brook
Piscataquis	Millinocket Lake Wetlands and West Branch Flowage
Piscataquis	Nahmakanta Lake
Piscataquis	West Branch Penobscot Fens
Sagadahoc	Kennebec Estuary
Somerset	Attean Pond - Moose River
Somerset	Baker Branch - St. John River
Somerset	Bald Mountain

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Somerset	Big and Little Moose Mountains
Somerset	Big Meadow Bog
Somerset	Big Ten Peatlands
Somerset	Bigelow Mountain - Flagstaff Lake - North Branch Dead River
Somerset	Carlton Pond North
Somerset	Cold Stream - West Forks
Somerset	Douglas Pond and Madawaska Bog
Somerset	Great Moose Lake
Somerset	Green Mountain
Somerset	Indian and Little Indian Ponds
Somerset	Kennebec Floodplain - Madison and Anson
Somerset	St. John River Southwest Branch
Somerset	Upper Sebasticook River Wetlands
Somerset	West Branch Penobscot Fens
Waldo	Appleton Bog - Pettingill Stream - Witcher Swamp
Waldo	Big Meadow Bog
Waldo	Camden Hills
Waldo	Carlton Pond North
Waldo	Unity Wetlands
Waldo	Upper Sheepscot River
Washington	Baskahegan Stream Uplands and Wetlands
Washington	Bog Brook Flowage
Washington	Bold Coast
Washington	Cobscook Bay
Washington	Cutler Grasslands
Washington	Englishman Bay
Washington	Fourth Machias Lake
Washington	Gouldsboro Grand Marsh
Washington	Great Heath
Washington	Great Wass Archipelago
Washington	Jonesport Heaths
Washington	Machias Bay
Washington	Maine River Wetland Complex
Washington	Meddybemps Heath
Washington	Nash Islands
Washington	Orange River
Washington	Petit Manan Point and Bays
Washington	Pleasant Bay
Washington	Roque Bluffs
Washington	Sawtelle Heath
Washington	Tunk Lake
Washington	Wahoa Bay
York	Bauneg Beg Mountain
York	Beaver Dam Heath
York	Biddeford / Kennebunkport Vernal Pool Complex
York	Brave Boat Harbor and Gerrish Island
York	Central Parsonsfield
York	Folsom Pond
York	Kennebunk Plains and Wells Barrens
York	Killick Pond
York	Massabesic Forest North
York	Massabesic Forest South
York	Mt. Agamenticus
York	Saco Heath

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York	Sanford Ponds
York	Scarborough Marsh
York	Shaker Pond
York	South Acton Swamps
York	Walnut Hill
York	Waterboro / Shapeleigh Barrens
York	Wells / Ogunquit Marshes Marsh
York	York River Headwaters

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Appendix D: Maine and the Maine Market Region Report, US Forest Service, Summary and Results

Summary

Between 2002 and 2009, the National Survey of Recreation and the Environment (NSRE) was accomplished by interviewing approximately 100,000 Americans aged 16 and over in random-digit-dialing telephone samplings. The primary purpose of the NSRE and was to learn about approximately 85 specific outdoor recreation activities of people aged 16 and over in the United States. Findings in this report are based upon approximately 900 total surveys for the State of Maine and approximately 6,400 for Maine's market region, which includes the states of CT, MA, ME, NH, RI and VT.

Nature Based Land Activities

Visiting a wilderness is the most popular nature-based land activity (47.1%), followed by day hiking (41.3%), in the state of Maine. Visiting a farm or agriculture setting (35.2%) along with developed camping (34.5%) are also popular activities with just over a third of state residents indicating participation within the last year. Slightly over a quarter of the state residents also indicate an interest in mountain biking, primitive camping and driving off-road. The somewhat specialized, technical outdoor pursuits usually requiring special gear like rock climbing and migratory bird hunting are among the least popular nature-based land activities with three percent or less of people participating.

Developed Setting Activities

Developed setting outdoor recreation is by far the most popular form of recreation in Maine. More residents indicated participation in walking for pleasure (87.6%) and outdoor family gatherings (80.3%) than in any other overall activity. Other activities, such as gardening or landscaping (63.7%) or driving for pleasure (63.0%) are also favorites with Maine residents.

Water Based Activities

Over half of Maine residents have swam in a lake or stream, been boating or visited a beach in the least year. Almost 40% have also swam in an outdoor pool or gone motor-boating. In addition, 35.4% of residents have done some type of freshwater fishing in the last year. Between 20% to 30% of residents have also enjoyed canoeing or several types of fishing activities.

Snow and Ice Based Activities

Over 55% of Maine residents participate in some form of a snow or ice activity in the last year. The most popular of these activities is snowmobiling, with 28.7% of the state participating. Sledging also attracts about 26.9% of the population, while snowboarding has the lowest participation rate at 9.2%.

Viewing / Learning Activities

Statewide the largest percentage of residents participating in viewing/learning activities is viewing or photograph natural scenery (73.1%), followed by viewing/photographing other wildlife (62.1%) and sightseeing (60.3%). Visiting outdoor nature centers, zoos, etc is also popular with over half the state residents participating. Over half of the state's residents have also viewed/photographed wildflowers or gathered mushrooms, berries, etc within the last year.

Individual Outdoor Sports Activities

Individual outdoor sports continue to be popular to with over a quarter of Maine residents running / jog (27.7%). Golf (19.1%) and inline skating (18.4%) were also somewhat popular with Maine residents. It is worth noting that almost 10% residents also chose to play hand- ball/racquetball or tennis outdoors.

Team Sports Activities

Less than 12% of Maine residents indicate participating in an outdoor team sports activity within the last year. However, while participation in team sports may be low, viewing or watching an outdoor sports event is popular with over 60% of residents indicating attendance at this type of event.

Mass Markets in Outdoor Recreation

In general, Maine residents are fairly active in the outdoor recreation as compared to the rest of the nation. Residents have fairly high participation rates in most outdoor recreation activities. This is due in part to a combination of abundant recreation resources and a seasonable climate which allows for wide ranging outdoor experiences.

Walking is the single most popular activity, with almost a million participants. The second most popular activity is outdoor family gatherings with over eight hundred thousand participants. Other activities with over half a million participants include gardening, driving for pleasure, picnicking, yard games, visiting a wilderness area, boating, visiting a beach, viewing or photographing natural scenery, wildlife, wildflowers or birds, sightseeing, visiting a nature center, etc, gathering mushrooms, berries, etc visiting historic sites, attending outdoor sports events, and swimming in lakes and streams..

Activities with between a quarter to half a million participants include driving off-road, day hiking, visiting a farm, developed or primitive camping, mountain biking or bicycling, attending outdoor concerts, swimming in a pool, motor-boating, freshwater fishing, visiting other water- sides, canoeing, coldwater fishing, snowmobiling, sledding, viewing or photographing fish, and taking boat tours.

Most activities, in general, with under 100 thousand participants include horseback riding, rock climbing, caving, scuba diving, sailing, etc attract few participants, relatively speaking, but these are often niche activities with a small but loyal participant base.

Table Set A: Maine Resident Participation Distribution by Age for Outdoor Recreation Activities. Percentages shown sum across to 100%, though rounding may make the total value differ from 100% exactly.

Participation Distribution By Age Developed-setting Land Activities.

Activity	Age 16-24 %	Age 25-34 %	Age 35-44 %	Age 45-54 %	Age 55-64 %	Age 65+ %
Walk for pleasure	14.5	17.3	20.9	18.2	11.7	17.3
Picnicking	9.8	18.5	23.8	18.5	12.7	16.7
Driving for pleasure	12.6	15.5	21.4	20.8	14.1	15.6
Bicycling	18.6	20.7	27.9	14.9	8.4	9.3
Horseback riding (any type)	18.2	22.9	19.1	24.6	9.5	5.7
Attend outdoor concerts, plays, etc.	9.0	28.1	24.1	20.6	4.1	14.1

Participation Distribution by Age for Viewing/Learning Based Activities.

Activity	Age 16-24 %	Age 25-34 %	Age 35-44 %	Age 45-54 %	Age 55-64 %	Age 65+ %
View/photograph natural scenery	12.8	15.3	22.1	20.0	12.6	17.1
View/photograph other wildlife	9.4	18.3	24.0	21.0	13.1	14.3
View/photograph wildflowers, trees, etc.	12.5	13.2	22.4	20.6	12.7	18.6
Visit nature centers, etc.	12.4	19.0	23.1	18.4	12.4	14.7
View/photograph birds	5.3	12.7	21.5	22.2	15.4	22.9
Sightseeing	11.4	13.2	21.7	23.6	13.1	16.9
Gather mushrooms, berries, etc.	12.9	17.4	22.4	21.2	10.1	16.0
Visit historic sites	10.3	15.9	24.6	18.6	13.3	17.3
View/photograph fish	11.7	22.9	26.9	18.3	9.2	11.0
Visit prehistoric/archeological sites	10.8	18.5	27.3	19.4	12.7	11.4
Boat tours or excursions	8.2	12.5	27.9	28.8	3.2	19.5

Participation Distribution by Age in Water-Based Activities

Activity	Age 16-24 %	Age 25-34 %	Age 35-44 %	Age 45-54 %	Age 55-64 %	Age 65+ %
Swimming in lakes, streams, etc.	17.1	19.0	24.8	16.8	10.3	11.9
Boating (any type)	16.4	19.1	23.6	18.9	10.6	11.2
Visit a beach	16.1	16.5	26.1	17.7	11.7	11.9
Motorboating	10.7	20.3	24.5	18.0	12.3	14.1
Freshwater fishing	13.7	22.0	26.5	21.3	9.2	7.2
Canoeing	18.6	21.8	25.3	18.4	8.9	6.9
Visit other waterside (besides beach)	21.2	19.7	23.9	16.7	8.4	10.1
Coldwater fishing	13.9	18.2	28.8	21.8	9.5	7.7
Swimming in an outdoor pool	18.1	16.4	30.2	17.3	9.3	8.7
Kayaking	22.8	25.0	18.6	18.4	10.2	5.0
Warmwater fishing	11.5	32.0	26.6	17.9	7.2	4.8
Saltwater fishing	15.4	20.0	22.6	21.3	9.0	11.6
Rafting	44.9	20.4	13.6	11.4	6.6	3.0
Rowing	10.7	21.8	19.3	21.2	12.0	15.0
Sailing	14.6	19.2	24.3	21.0	5.8	15.0
Waterskiing	25.8	24.2	27.7	17.3	2.5	2.4
Use personal watercraft	40.6	20.0	25.0	9.1	3.1	2.1
Snorkeling	13.5	15.7	33.6	23.5	7.0	6.8
Anadromous fishing	15.5	13.0	35.5	22.0	4.3	9.7

Participation Distribution by Age for Outdoor Sports.

Activity	Age 16-24 %	Age 25-34 %	Age 35-44 %	Age 45-54 %	Age 55-64 %	Age 65+ %
Attend outdoor sports events	23.3	14.3	25.3	21.2	5.1	10.8
Running or jogging	24.5	27.2	22.7	16.8	1.4	7.4
Golf	13.4	18.7	25.7	28.4	9.4	4.5

Participation Distribution by Age for Nature-Based Land Activities.

Activity	Age 16-24 %	Age 25-34 %	Age 35-44 %	Age 45-54 %	Age 55-64 %	Age 65+ %
Visit a wilderness or primitive area	16.4	17.8	24.9	18.4	10.9	11.5
Day hiking	16.4	20.2	25.5	17.7	8.4	11.8
Developed camping	14.1	21.5	26.6	14.9	10.7	12.1
Mountain biking	21.3	21.8	28.6	14.7	6.9	6.7
Primitive camping	13.6	29.2	26.1	14.3	8.6	8.1
Visit a farm or agricultural setting	10.8	15.1	25.3	20.5	11.3	17.0
Drive off-road	20.1	18.9	21.5	21.1	9.3	9.1
Backpacking	20.6	28.4	24.2	16.7	6.3	3.8
Hunting (any type)	12.6	14.0	26.1	20.9	12.8	13.5
Horseback riding on trails	19.3	20.8	24.1	30.6	3.7	1.5
Mountain climbing	11.8	21.6	16.9	37.2	5.3	7.2

Participation Distribution by Age for Snow/Ice-Based Activities.

Activity	Age 16-24 %	Age 25-34 %	Age 35-44 %	Age 45- 54 %	Age 55-64 %	Age 65+ %
Snowmobiling	20.8	21.7	26.2	14.9	8.1	8.4
Cross country skiing	16.6	18.9	29.0	19.6	11.2	4.7
Downhill skiing	27.0	23.0	29.3	15.0	3.0	2.7
Sledding	28.6	23.5	24.4	15.6	4.2	3.6
Snowboarding	45.9	19.3	29.1	2.5	1.7	1.6
Ice skating outdoors	10.8	17.4	34.6	24.4	10.2	2.6
Snowshoeing	13.8	23.9	21.2	31.5	6.8	2.9
Ice fishing	8.7	10.2	22.0	49.7	6.4	3.0

Table Set B: Maine and New England Outdoor Recreation Participation Figures Ordered by Participation Rates for Activity Types.

Participation in Nature-based Land Activities.

Maine

Activity	Percent participating	Number of participants (1,000s)
Visit a wilderness or primitive area	47.1	506
Day hiking	41.3	444
Visit a farm or agricultural setting	35.2	378
Developed camping	34.5	371
Mountain biking	27.7	298
Primitive camping	27.3	293
Drive off-road	26.7	287
Hunting (any type)	18.8	202
Backpacking	18.3	197
Big game hunting	17.3	186
Mountain climbing	15.9	171
Small Game hunting	11.3	121
Horseback riding on trails	5.2	56
Rock climbing	3.3	35
Orienteering	1.7	18
Migratory bird hunting	1.4	15

New England

Activity	Percent participating	Number of participants (1,000s)
Day hiking	38.0	4,359
Visit a wilderness or primitive area	36.7	4,210
Visit a farm or agricultural setting	34.6	3,969
Developed camping	26.6	3,052
Mountain biking	25.2	2,891
Primitive camping	16.4	1,881
Drive off-road (any type)	15.7	1,801
Backpacking	14.5	1,663
Mountain climbing	9.5	1,090
Hunting (any type)	9.1	1,044
Big game hunting	7.3	837
Horseback riding on trails	5.6	642
Small Game hunting	4.9	562
Rock climbing	3.8	436
Orienteering	2.1	241
Migratory bird hunting	1.4	161

Participation in Developed-setting Land Activities

Maine

Activity	Percent participatin	Number of participants (1,000s)
Walk for pleasure	87.6	942
Family gathering	80.3	863
Gardening or landscaping for pleasure	63.7	685
Driving for pleasure	63.0	677
Picnicking	61.7	663
Yard games, e.g., horseshoes	50.1	539
Bicycling	38.2	411
Attend outdoor concerts, plays, etc.	37.7	405
Horseback riding (any type)	7.0	75

New England

Activity	Percent participatin	Number of participants (1,000s)
Walk for pleasure	86.9	9,969
Family gathering	75.6	8,673
Gardening or landscaping for pleasure	66.2	7,594
Driving for pleasure	58.3	6,688
Picnicking	55.6	6,378
Yard games, e.g., horseshoes	47.7	5,472
Attend outdoor concerts, plays, etc.	46.2	5,300
Bicycling	39.6	4,543
Horseback riding (any type)	7.0	803

Participation in Water-based Activities.

Maine

	Percent participating	Number of participants (1,000s)
Swimming in lakes, streams, etc.	64.4	692
Boating (any type)	56.9	612
Visit a beach	53.5	575
Swimming in an outdoor pool	38.5	414
Motorboating	38.0	409
Freshwater fishing	35.4	381
Visit other waterside (besides beach)	31.9	343
Canoeing	29.4	316
Coldwater fishing	28.0	301
Warmwater fishing	22.2	239
Kayaking	16.3	175
Saltwater fishing	15.8	170
Rafting	12.3	132
Rowing	9.8	105
Sailing	9.0	97
Waterskiing	7.1	76
Use personal watercraft	6.9	74
Anadromous fishing	6.7	72
Snorkeling	6.4	69
Scuba diving	1.7	18
Windsurfing	1.0	11
Surfing	0.6	6

New England

	Percent participating	Number of participants (1,000s)
Swimming in lakes, streams, etc.	58.7	6,734
Visit a beach	52.3	6,000
Boating (any type)	43.9	5,036
Swimming in an outdoor pool	43.5	4,990
Visit other waterside (besides beach)	27.4	3,143
Motorboating	27.0	3,097
Freshwater fishing	25.0	2,868
Canoeing	18.3	2,099
Coldwater fishing	16.5	1,893
Warmwater fishing	16.4	1,881
Saltwater fishing	14.4	1,652
Kayaking	10.9	1,250
Sailing	10.0	1,147
Rafting	9.4	1,078
Snorkeling	8.5	975
Rowing	6.8	780
Use personal watercraft	6.4	734
Waterskiing	5.9	677
Anadromous fishing	4.4	505
Scuba diving	1.9	218
Windsurfing	1.2	138
Surfing	1.2	138

Participation in Snow and Ice-based Activities

Maine

Activity	Percent participati	Number of participant s (1,000s)
Snow/ice activities (any type)	55.2	593
Snowmobiling	28.7	309
Sledding	26.9	289
Snowshoeing	16.7	180
Cross country skiing	14.4	155
Downhill skiing	12.6	135
Ice skating outdoors	12.4	133
Ice fishing	11.1	119
Snowboarding	9.2	99

New England

Activity	Percent participatin	Number of participants (1,000s)
Snow/ice activities (any type)	43.5	4,990
Sledding	23.4	2,684
Downhill skiing	13.6	1,560
Ice skating outdoors	12.7	1,457
Snowmobiling	12.0	1,377
Cross country skiing	10.0	1,147
Snowshoeing	8.8	1,010
Snowboarding	6.1	700
Ice fishing	4.4	505

Participation in Viewing/Learning Activities

Maine

Activity	Percent participating	Number of participants (1,000s)
View/ photograph natural scenery	73.1	786
View/ photograph other wildlife	62.1	668
Sightseeing	60.3	648
Visit nature centers, zoos, etc.	56.5	607
View/ photograph wildflowers, trees, etc.	55.7	599
Gather mushrooms, berries, etc.	52.7	567
Visit historic sites	46.8	503
View/ photograph birds	46.7	502
View/ photograph fish	33.2	357
Boat tours or excursions	26.3	283
Visit prehistoric archeological sites	18.3	197
Caving	2.2	24

NewEngland

Activity	Percent participating	Number of participants (1,000s)
View/ photograph natural scenery	67.7	7,767
Visit nature centers, zoos, etc.	56.8	6,516
Sightseeing	56.0	6,424
Visit historic sites	50.6	5,805
View/ photograph wildflowers, trees, etc.	50.5	5,793
View/ photograph other wildlife	50.2	5,759
View/ photograph birds	42.0	4,818
Gather mushrooms, berries, etc.	37.7	4,325
Boat tours or excursions	27.2	3,120
View/ photograph fish	26.3	3,017
Visit prehistoric archeological sites	18.9	2,168
Caving	3.4	39

Participation in Outdoor Sports (Individual and Team)

Maine

NewEngland

Type of Sport=Individual

Activity	Percent participatin	Number of participant s (1,000s)
Running or jogging	27.7	298
Golf	19.1	205
Inline skating	18.4	198
Handball or racquetball outdoors	8.0	86
Tennis outdoors	7.9	85

Activity	Percent participatin	Number of participant s (1,000s)
Running or jogging	28.9	3,315
Golf	17.4	1,996
Inline skating	17.3	1,985
Tennis outdoors	10.4	1,193
Handball or racquetball outdoors	9.9	1,136

Type of Sport=Team

Activity	Percent participati	Number of participant s (1,000s)
Attend outdoor sports events	60.4	649
Softball	12.3	132
Basketball outdoors	9.1	98
Baseball	6.6	71
Soccer outdoors	4.6	49
Football	4.0	43
Volleyball outdoors	4.0	43

Activity	Percent participatin	Number of participant s (1,000s)
Attend outdoor sports events	51.9	5,954
Basketball outdoors	11.8	1,354
Softball	10.0	1,147
Volleyball outdoors	9.4	1,078
Soccer outdoors	8.1	929
Football	6.9	792
Baseball	5.1	585