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 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 is available online for public review and comment. The plan availability for comment is promoted via Bureau press releases.

Submittal to National Park Service

With the full draft plan made available to the public, a full draft version of the plan is also sent to the National Park Service for review. Later, the final plan, including any revisions made as a result of the final review process, is to be 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:
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287-4920 rex.turner@maine.gov

Brainstormed Issues, Trends, and Opportunities: ME SCORP Steering Committee, 5/8/14

Note: issues, trends, and opportunities are separate columns and do not correspond across rows.

Issues	**Trends**	**Opportunities**
Economic priority: "what will make a positive impact in the short and long-term?" Also a **trend and opportunity**	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 **opportunity** 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. **Opportunity too** – awareness and education, trail design		Improved/expanded outdoor education programming at state parks and private campgrounds.

Issues	**Trends**	**Opportunities**
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

- 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 entitites.
- 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-born 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:
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Appendix B:

2015-2020 Maine State Comprehensive Outdoor Recreation Plan Survey

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 2015-2020 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 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 2015-2020 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.

Table 1. Summary Table Illustrating the Background of Each of the Survey Segments.

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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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

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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	-	-
2015-2020 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:

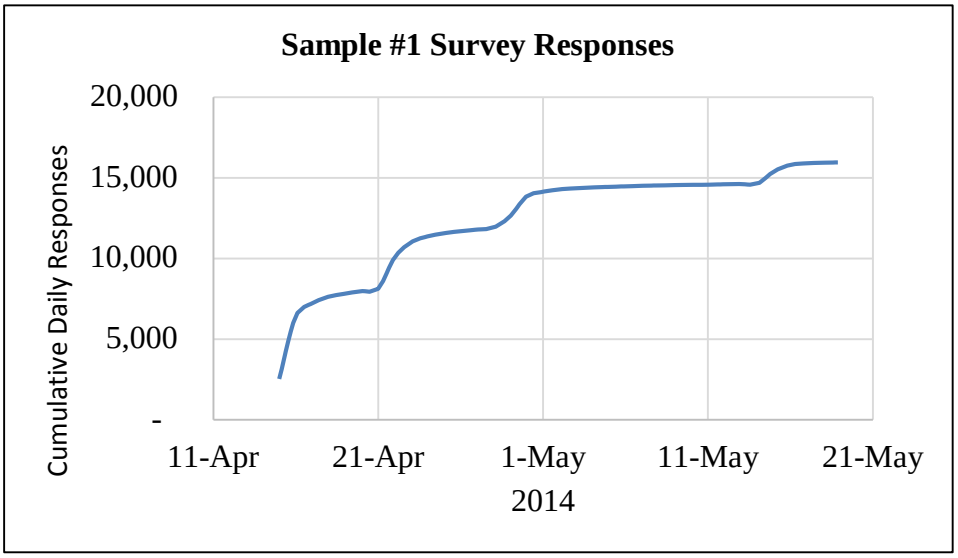

Figure 1. Cumulative Responses for Sample #1 Survey Participants

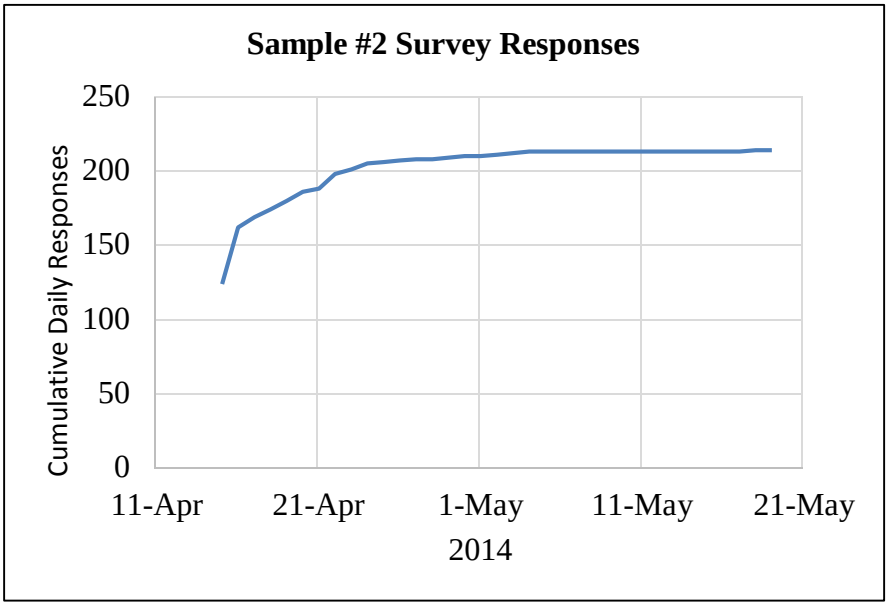

Figure 2. Cumulative Responses for Sample #2 Survey Participants

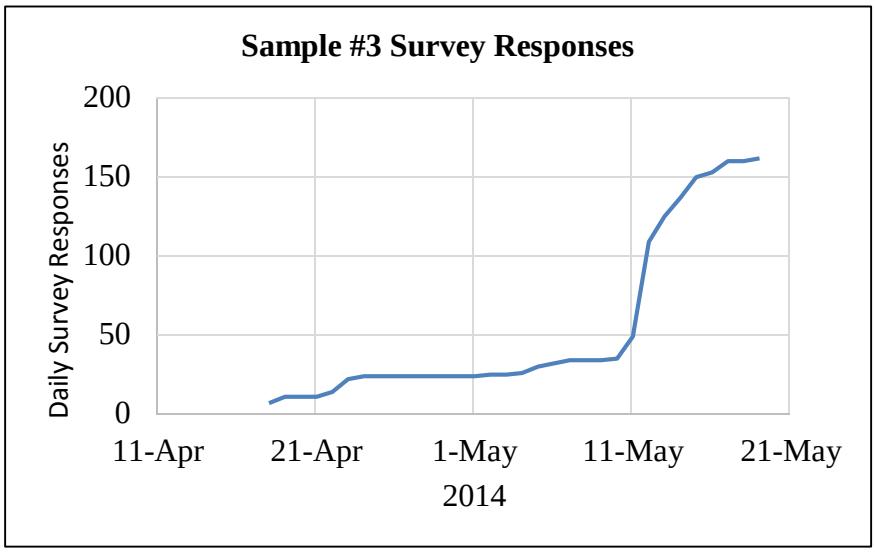

Figure 3. Cumulative Responses for Sample #3 Survey Participants

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).

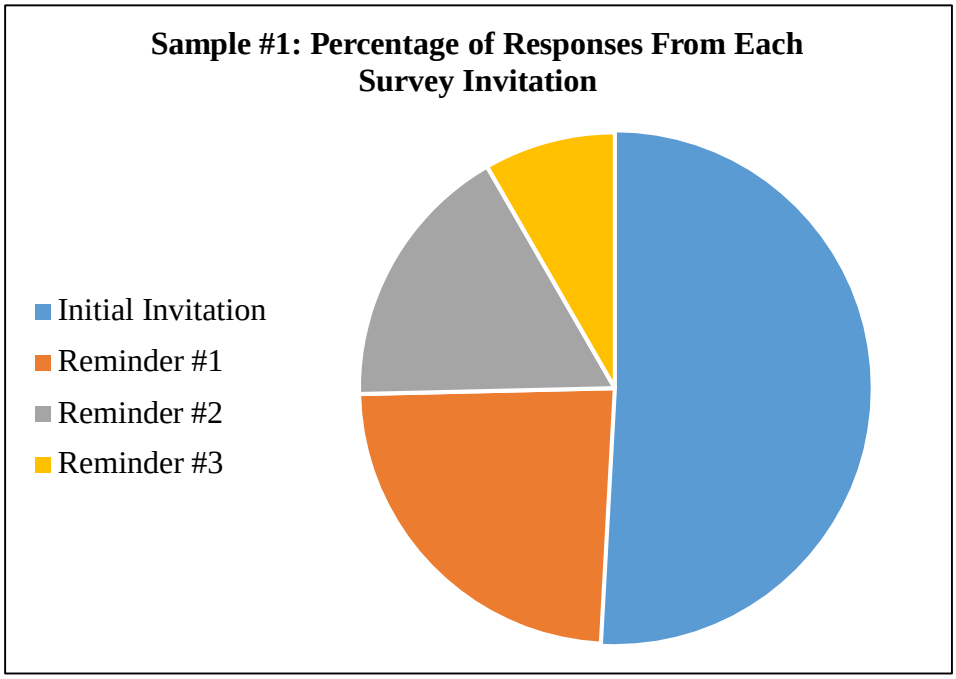

Figure 4. Relative Percentage and Number of Responses from Each Survey Invitation for Sample #1.

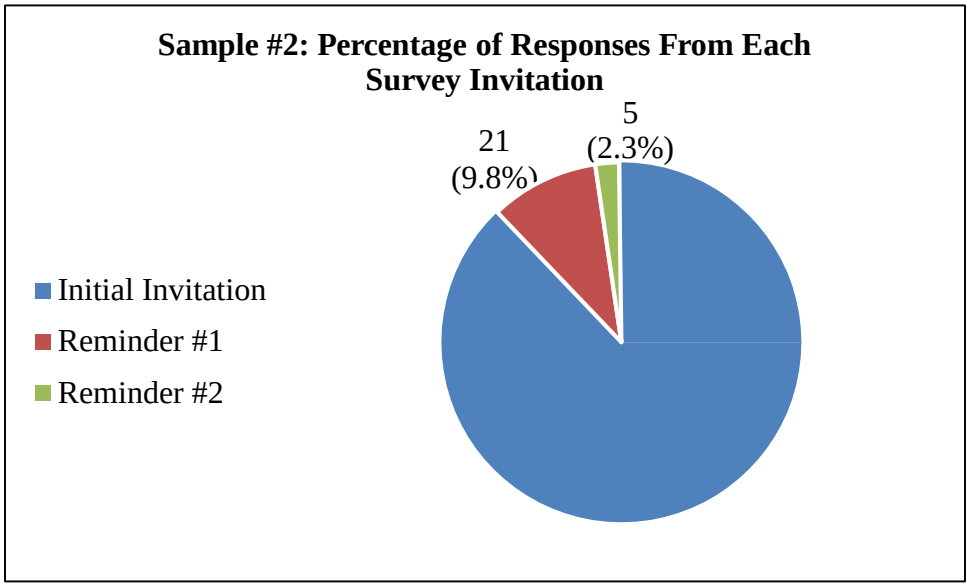

Figure 5. Relative Percentage and Number of Responses from Each Survey Invitation for Sample #2.

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.

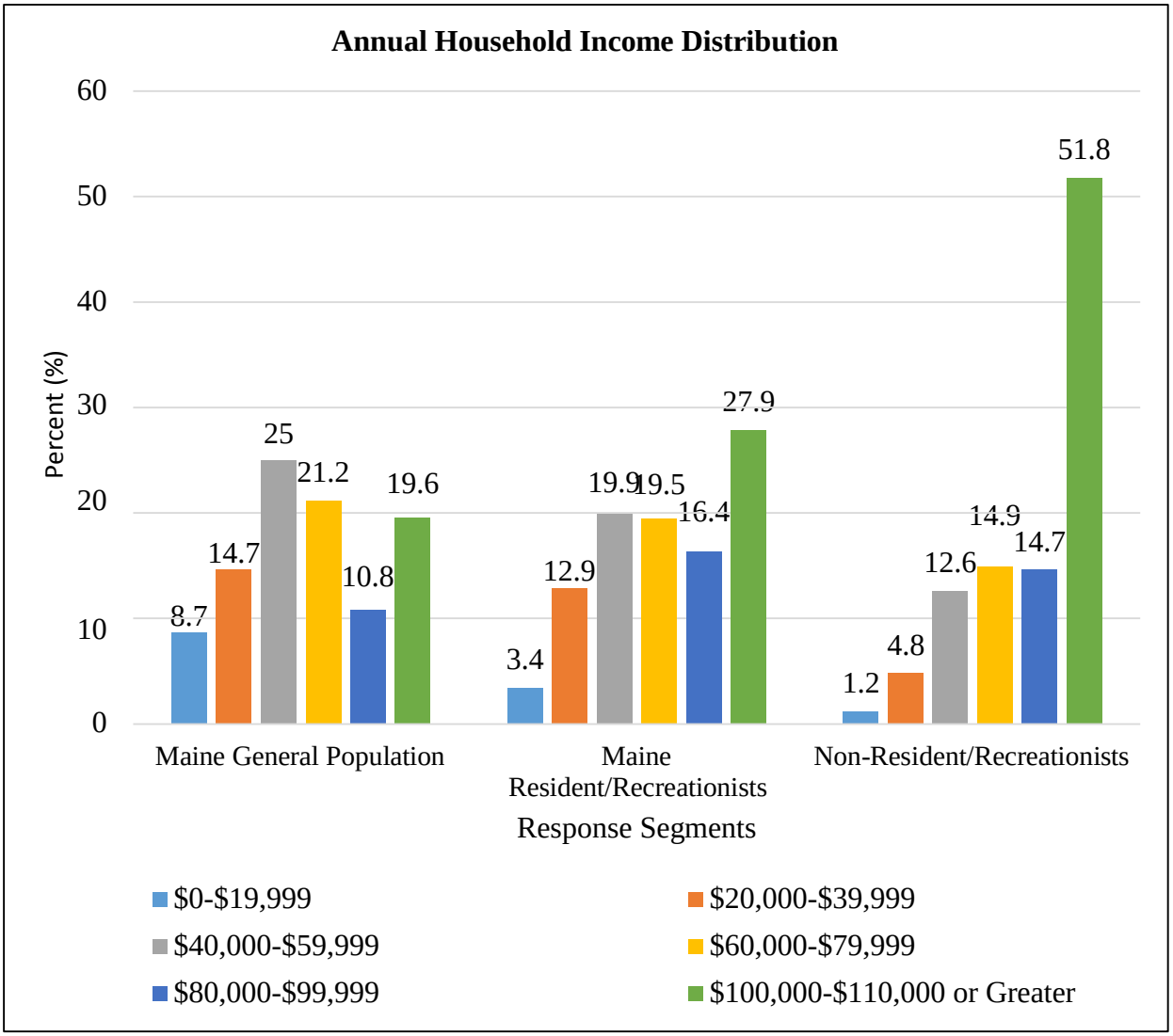

Figure 6. Annual Household Income Distributions for the Three Primary Survey Segments.

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.

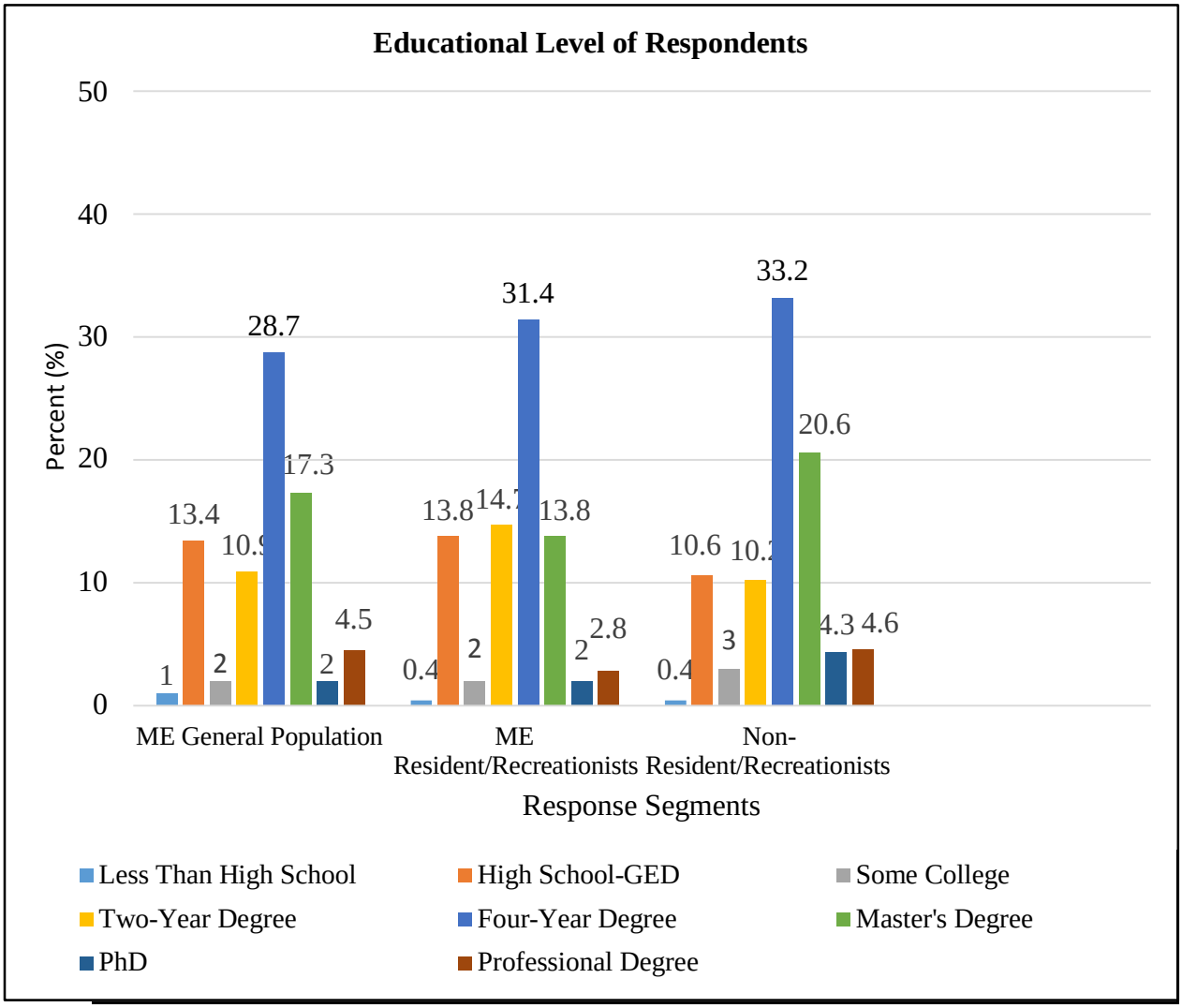

Figure 7. Relative Educational Distribution for the Three Primary Survey Segments.

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.

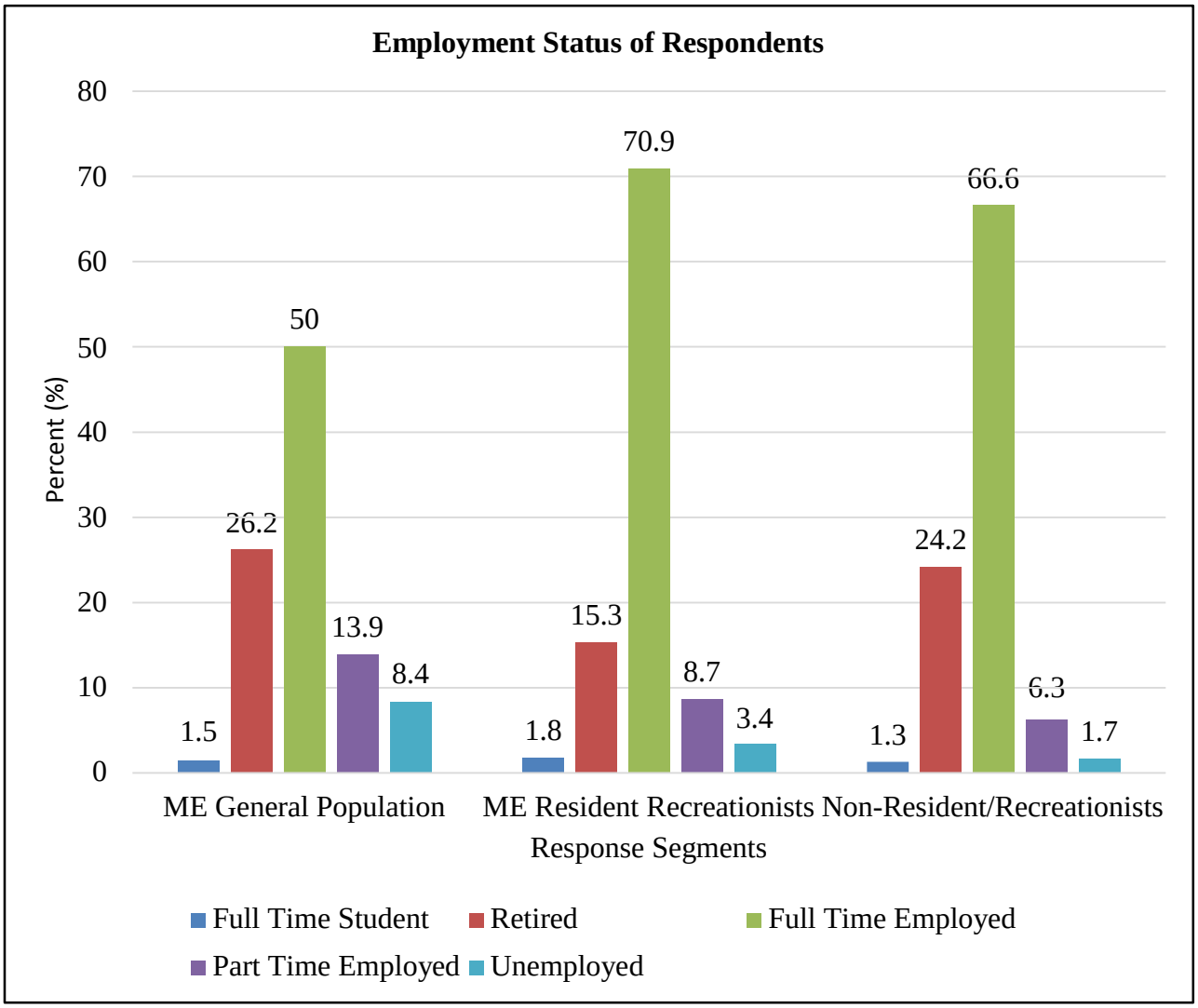

Figure 8. Employment Status Distribution for each of the Three Primary Survey Segments.

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.

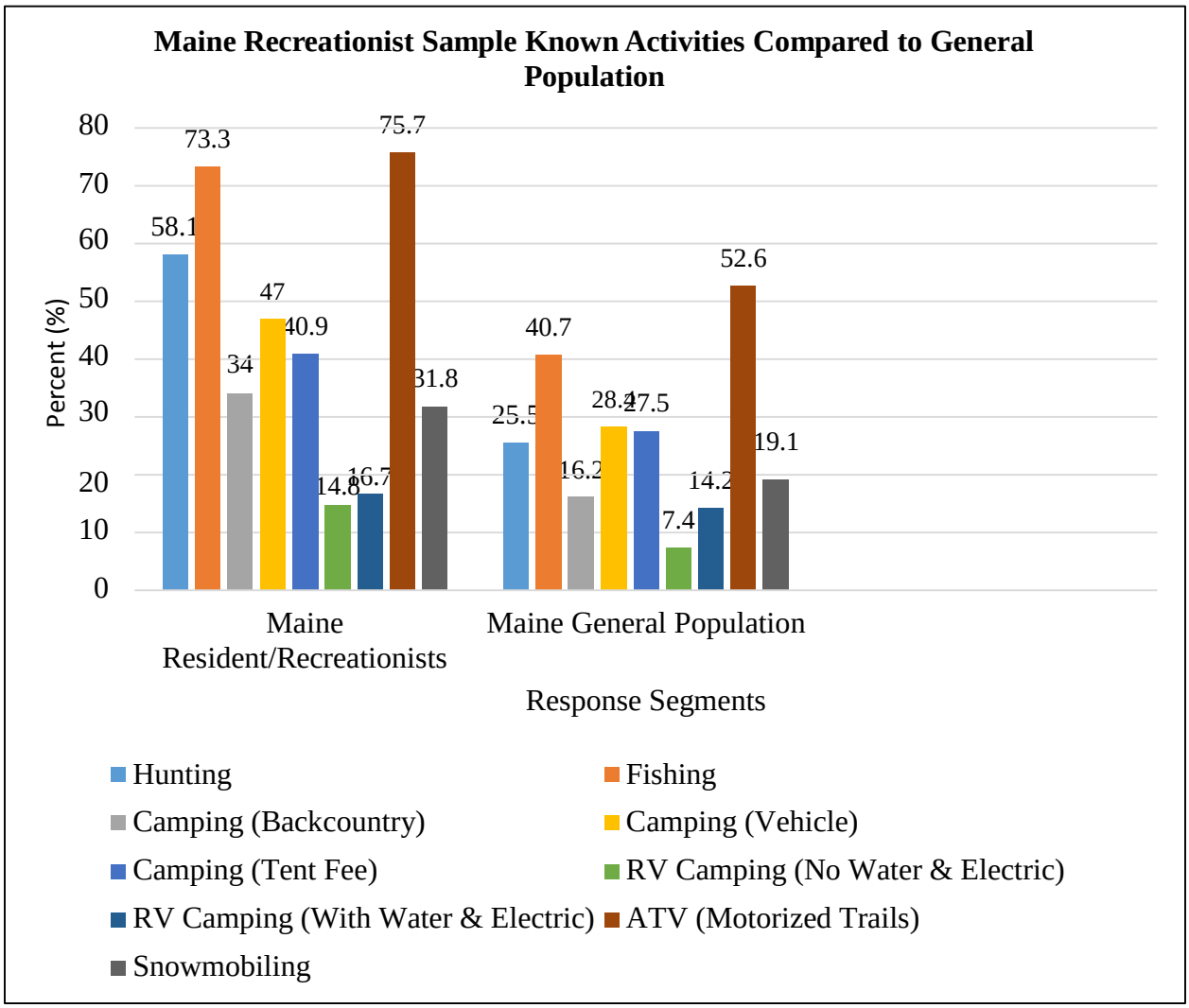

Figure 9. Maine Resident/Recreationist Known Activities as Compared to the Sampled Maine General Population Segment.

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.

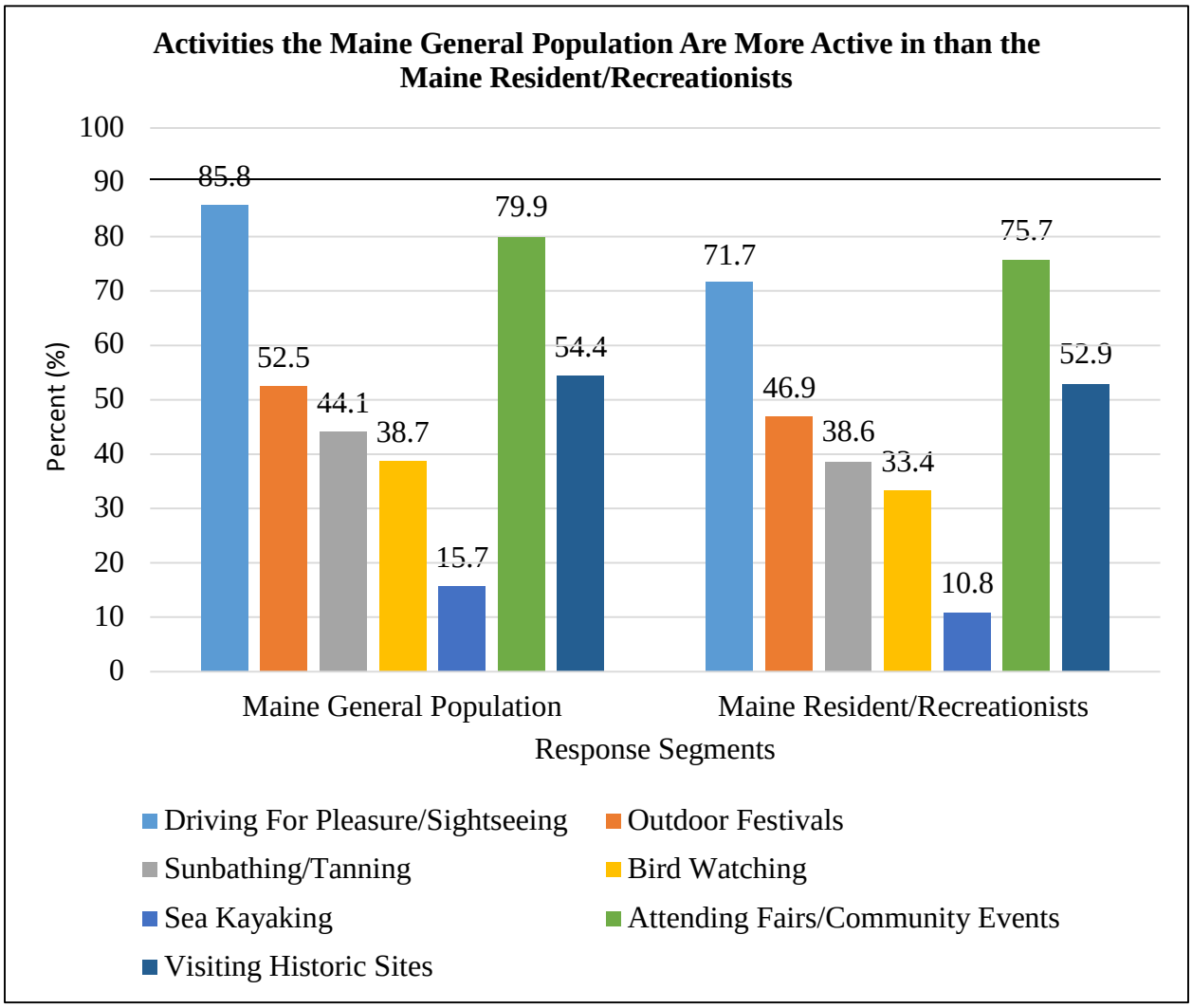

Figure 10. The Seven Activities that the Maine General Population Segment are more active in Than the Maine Resident/Recreationists Segment.

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.

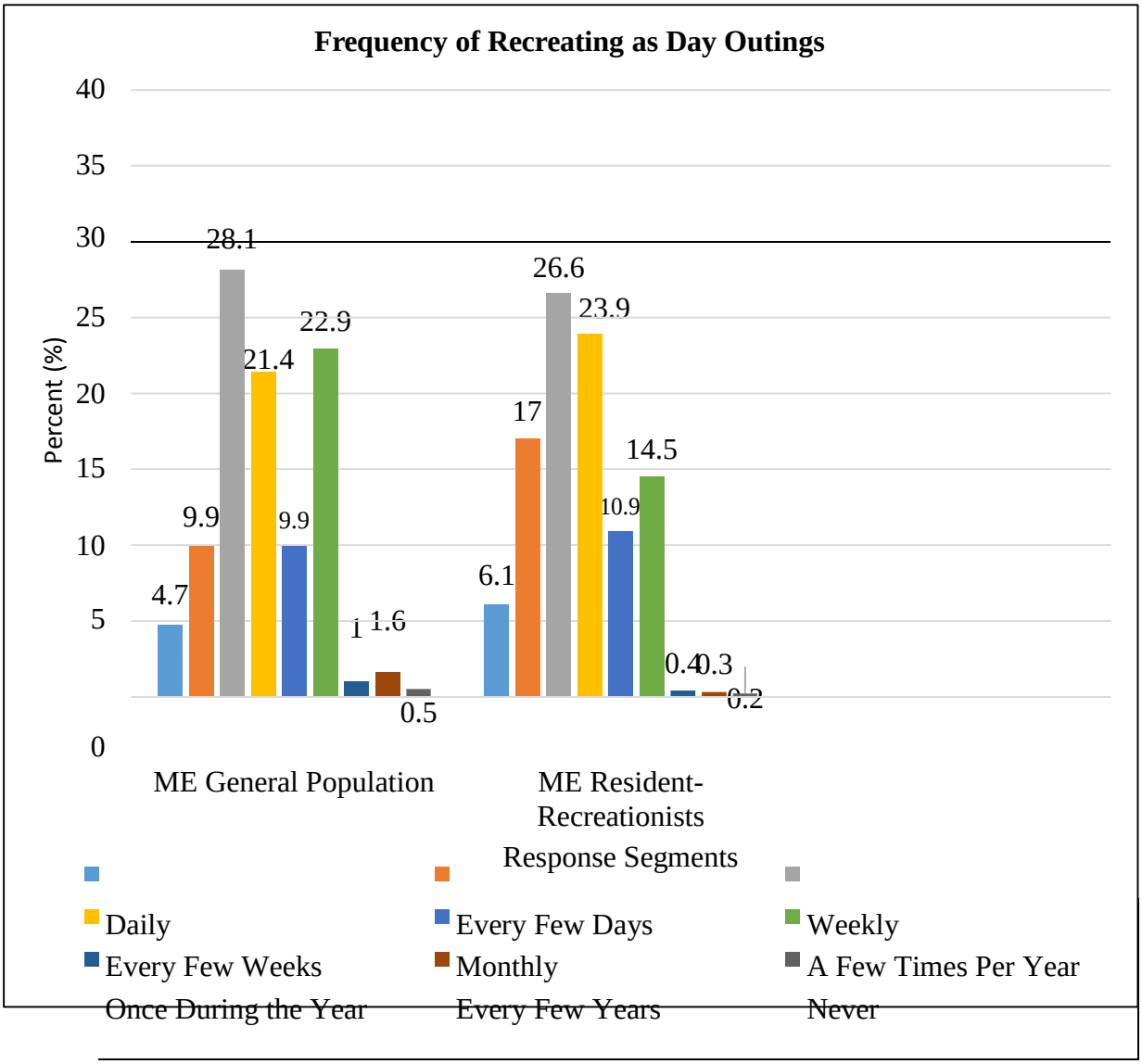

Figure 11. The Relative Frequency for Participating in Outdoor Recreation Activities in Maine over the Past Two Years (2012-2014).

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.

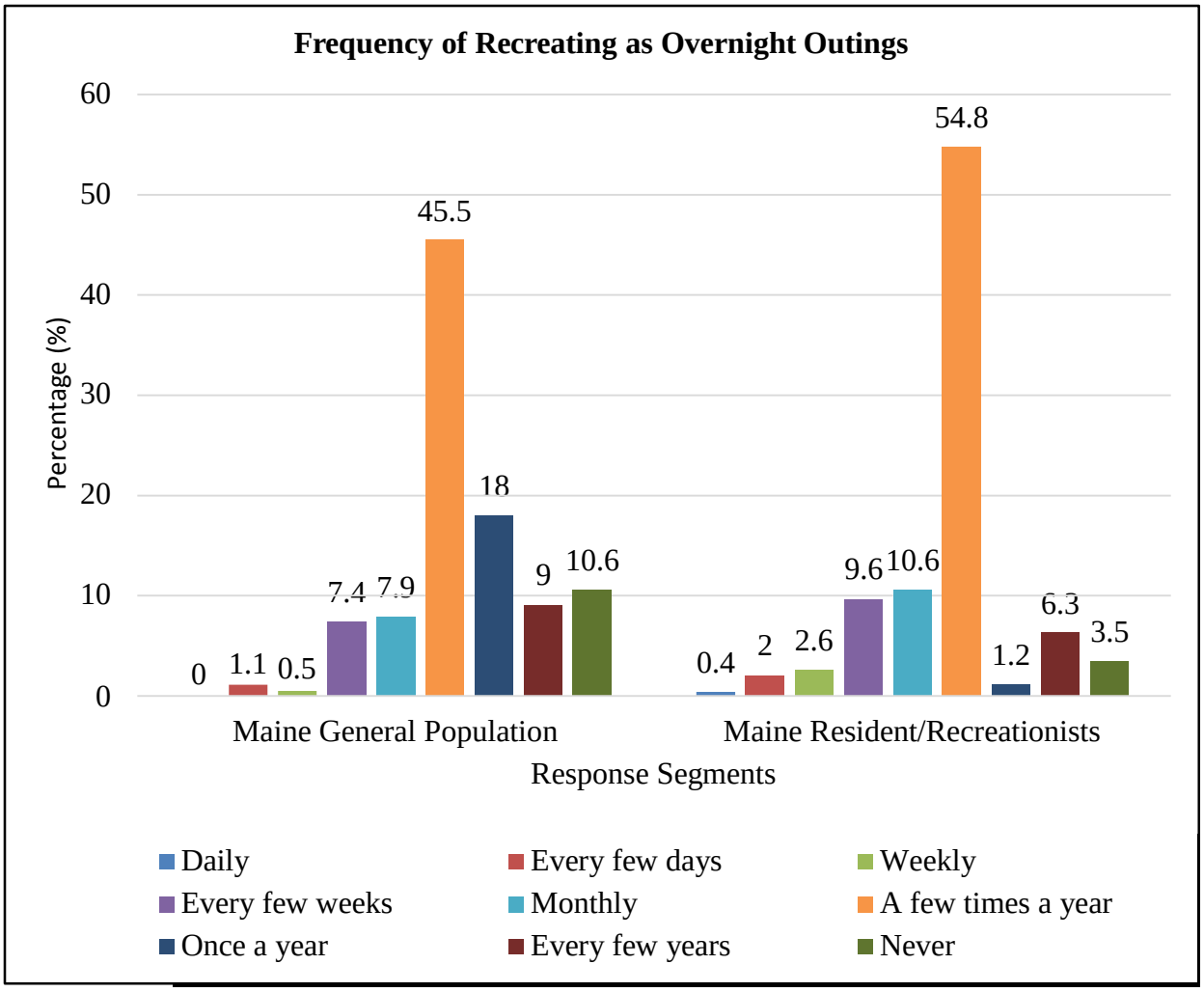

Figure 12. The Relative Frequency for Participating in Outdoor Recreation Activities as Overnight Outings in Maine over the Past Two Years (2012-2014).

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.

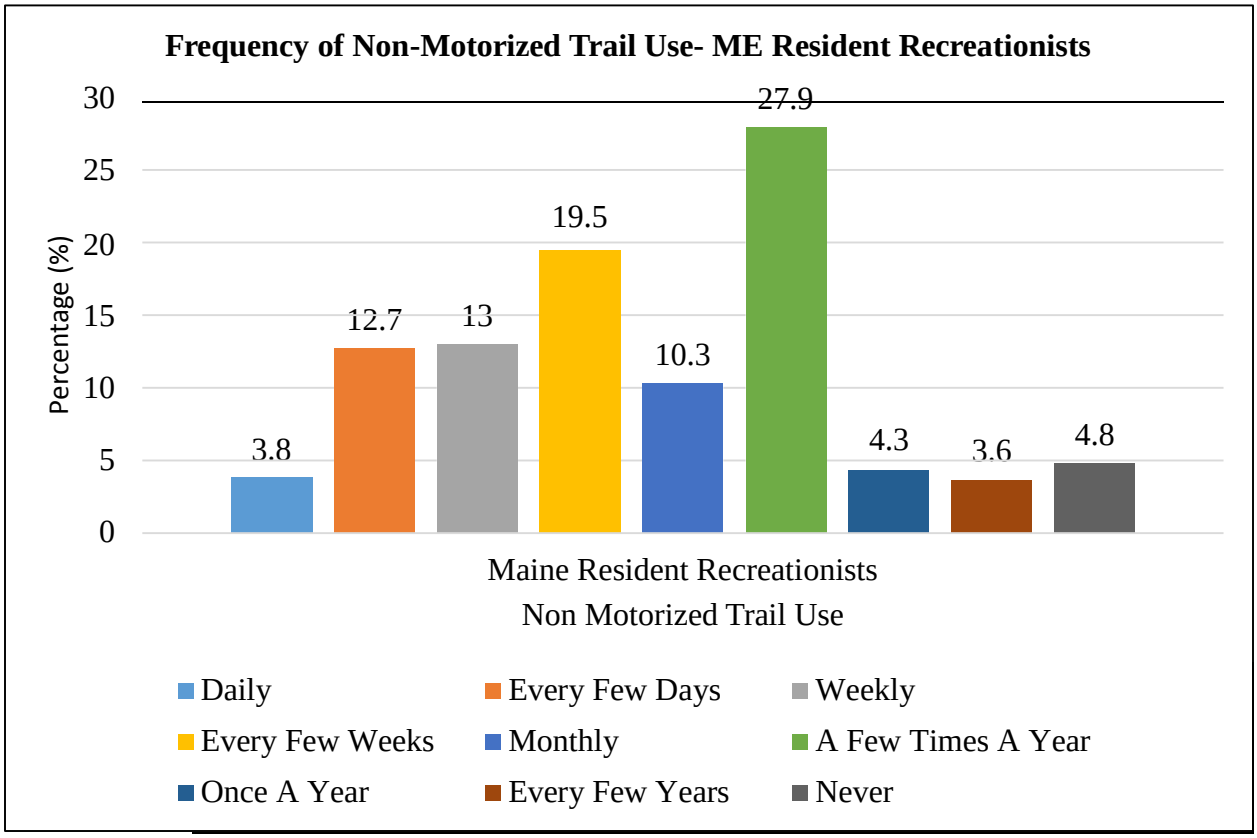

Figure 13. The Relative Amount of Time the Maine Resident/Recreationists Segment Pursue Activities on Non-Motorized Trails.

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%).

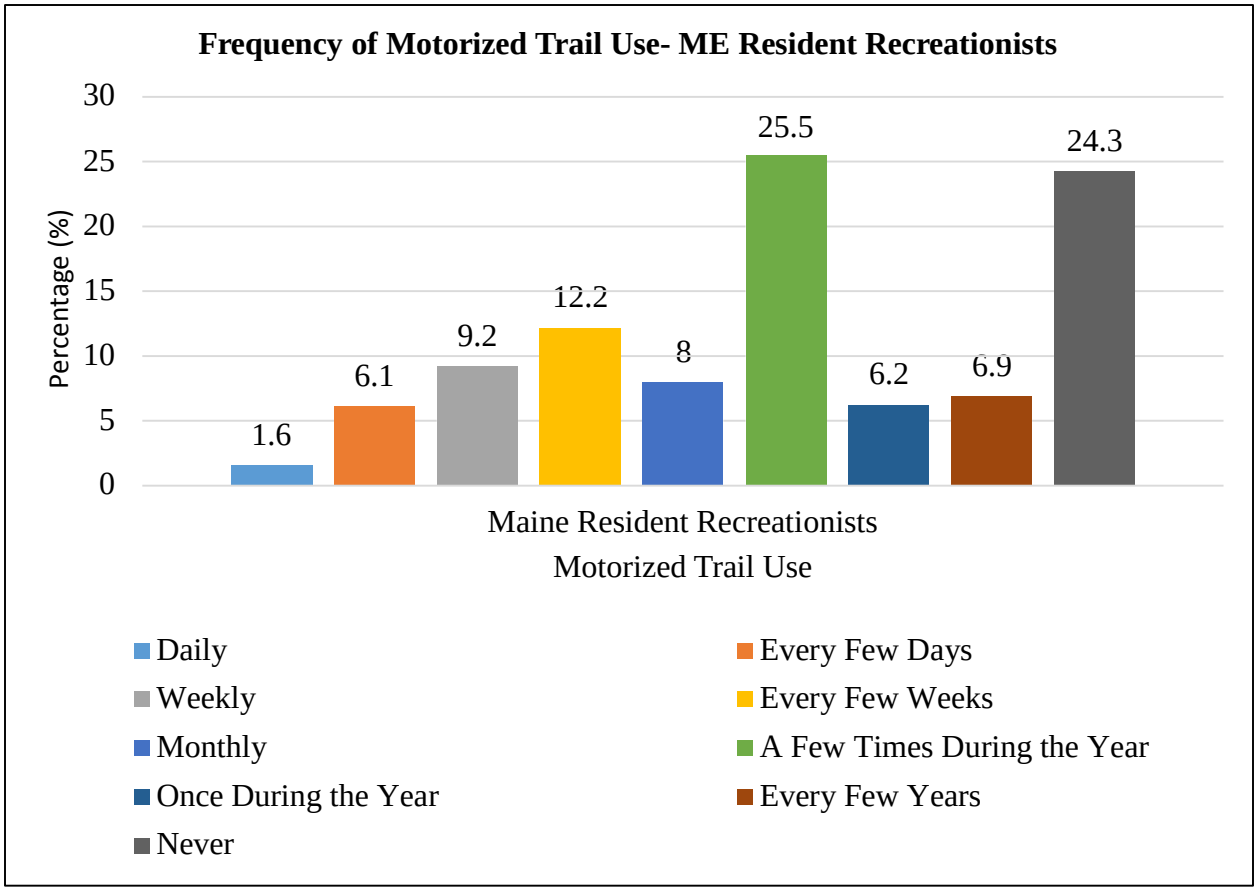

Figure 14. The Relative Amount of Time the Maine Resident/Recreationists Segment Pursue Activities on Motorized Trails.

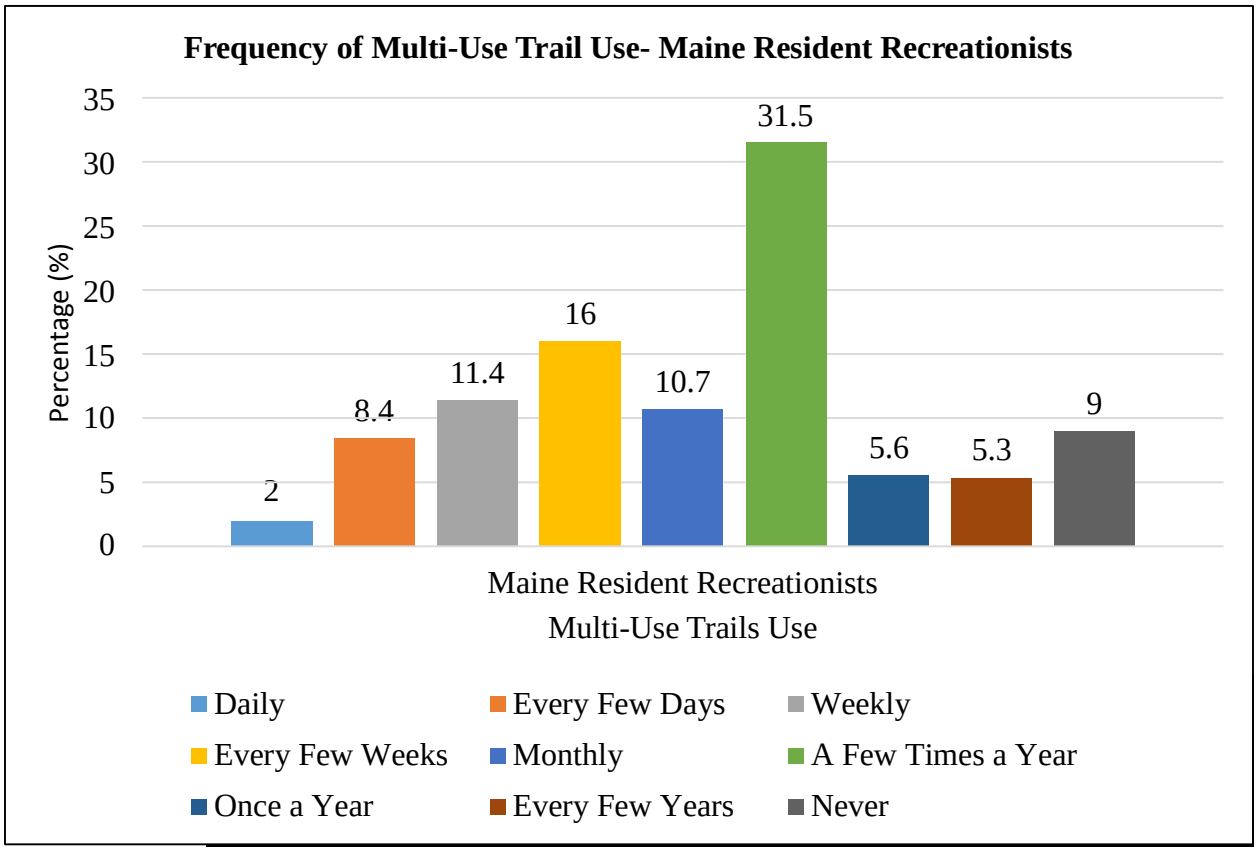

Figure 15. The Relative Amount of Time the Maine Resident/Recreationists Segment Pursue Activities on Multi-Use Trails.

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 seem 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

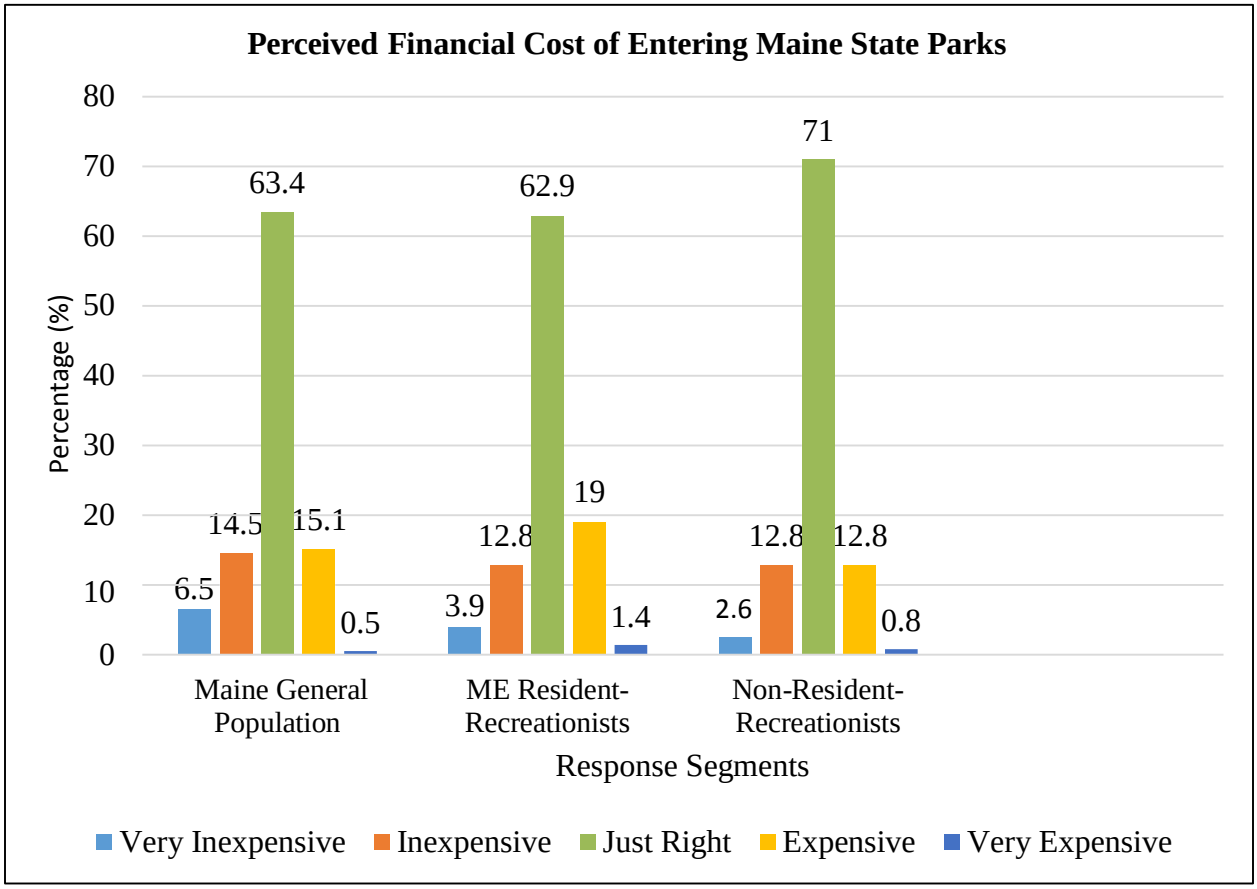

Figure 16. The Relative Perceived Financial cost of Maine State Park Entrance Fees by the Three Primary Survey Segments.

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.

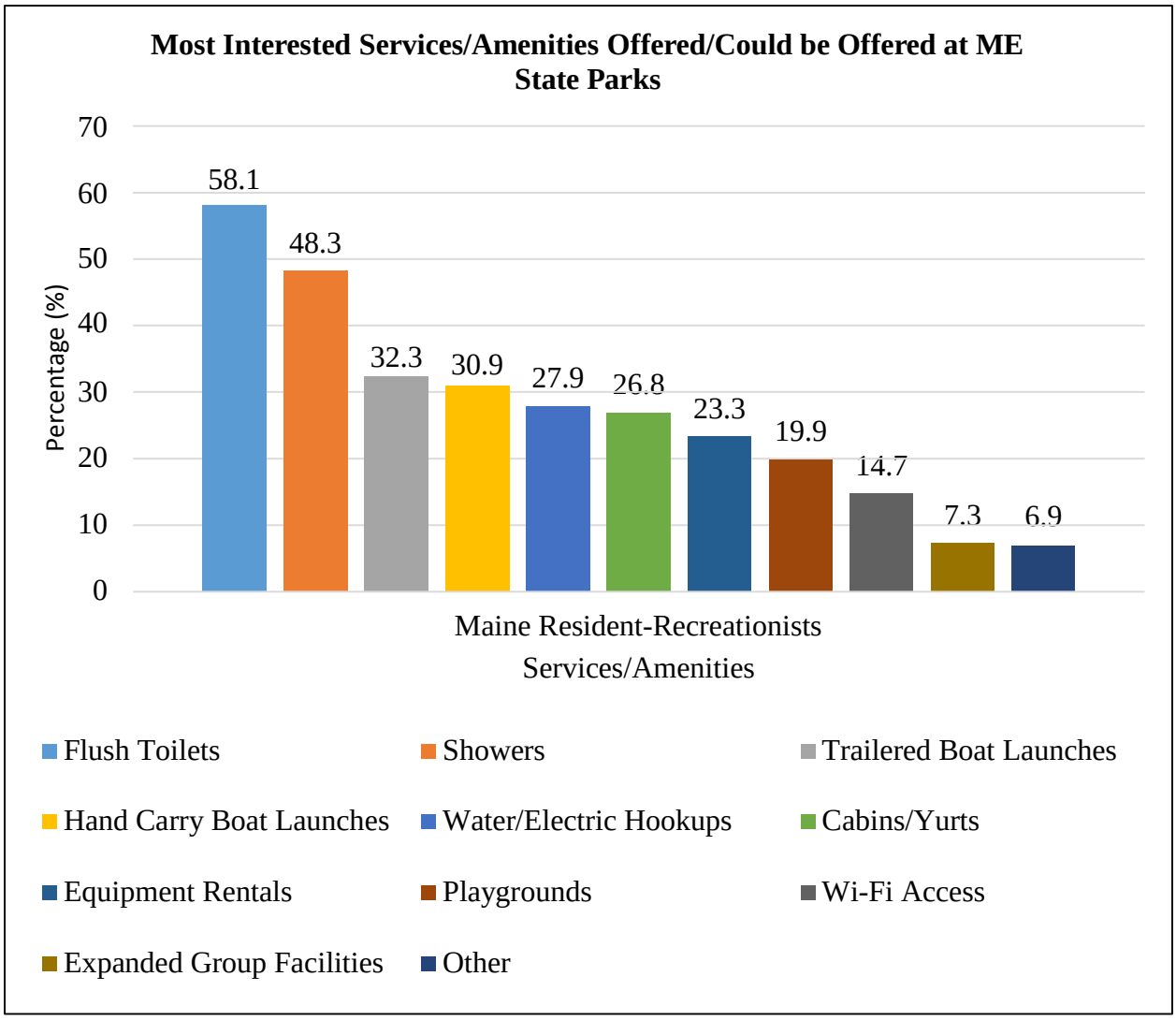

Figure 17. The Services/Amenities the Maine Resident/Recreationists most Appreciate Having Offered or potentially could be Offered at Maine State Parks.

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 Before

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

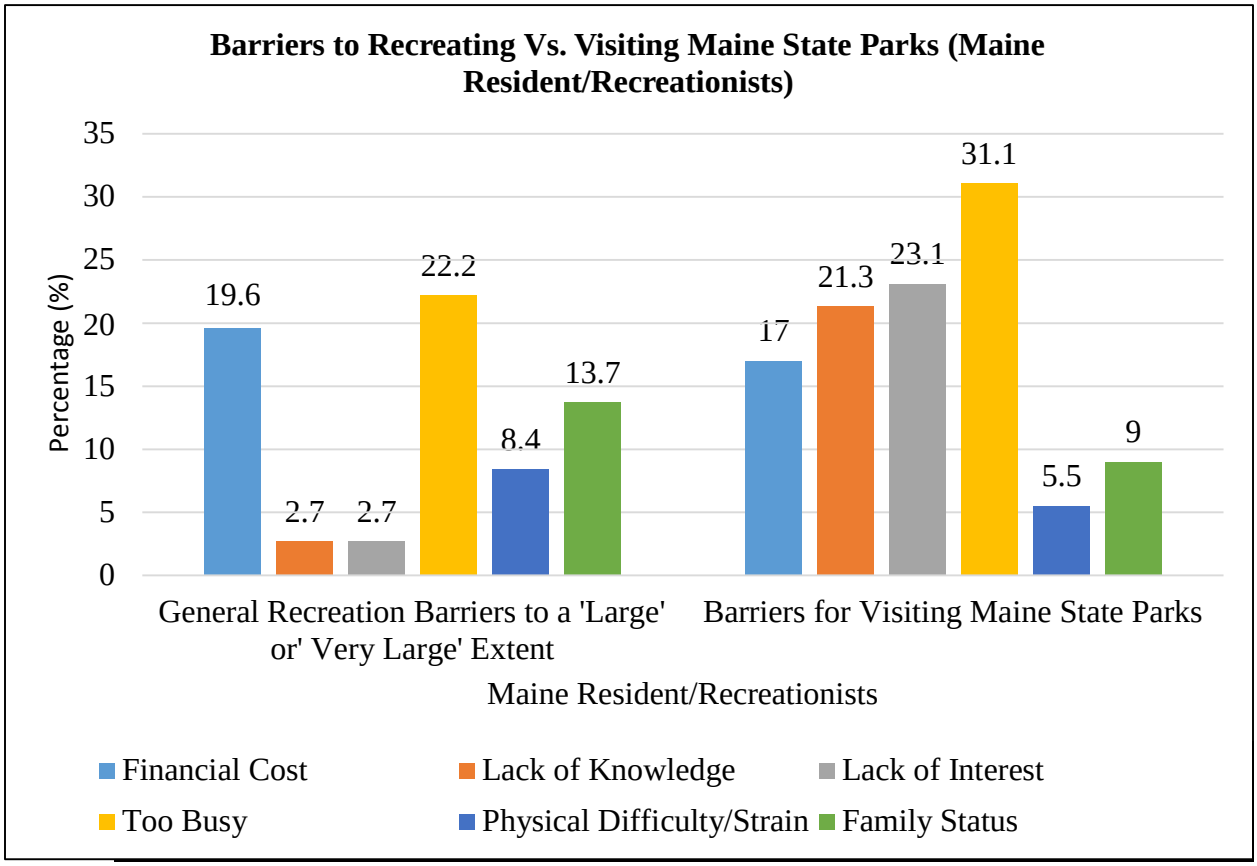

Figure 18. A Relative Comparison between Barriers to Participating in Outdoor Activities and visiting Maine State Parks.

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.

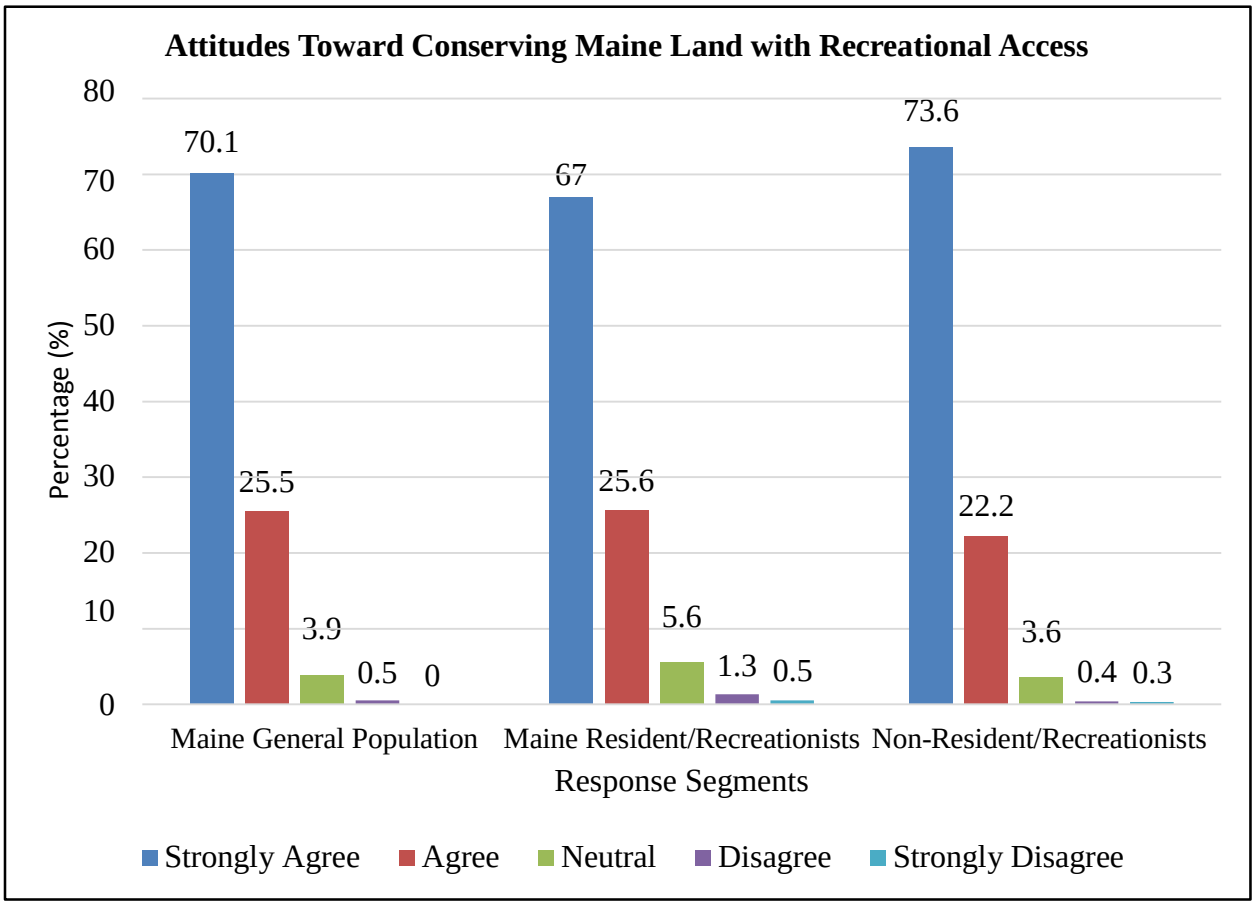

Figure 19. The Relative Attitudes of each of the Survey Segments Regarding the Conservation of Maine Land with Recreational Access.

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% or 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 (%)
Perceived Social Costs of Tourism Activities					
"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
Environmental Sustainability and Tourism					
"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
Long-Term Tourism Planning Principles					
"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
Perceived Economic Benefits of Tourism					
"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
Community Centered Tourism Business Economy					
"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
Ensuring the Satisfaction of Visitors					
"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
Maximizing Community Participation in Tourism Efforts					
"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.

Figure 20. Open Ended Analysis "Word Cloud" Expressing Key Terms/Themes Used.

This figure serves to highlight the key themes that emerged from the analysis of open ended comments. In this depiction, the size of words represents the frequency words appeared. It can be clearly seen that “Maine” was the most common word appearing as well as other like “State”, “hunting”, “trails”, “people”, and “parks”.

4. Conclusions and Recommendations

Conducting an online-based survey proved to have a number of key advantages. First, this approach made it cost-effective to invite a large number of contacts to participate and to send multiple follow-up emails to increase response rate. Other methods, such as mail or phone surveys, would have required more team members, more time to organize and collect data, at a higher cost not feasible for the funding available. Having several study samples was also valuable as it allowed for an opportunity to obtain insight from multiple perspectives (Maine General Population, Maine Resident/Recreationists, Non-Resident/Recreationists) and compare their unique recreational profiles. This also served a secondary purpose of ensuring that responses were plausible and

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:

- ☐ for an honors thesis/senior thesis/capstone?
- ☐ for a doctoral dissertation?
- ☐ other (specify)
- ☐ for a master's thesis?
- ☐ for a course project?

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*.

3/20/14 John J Daigle
Date Principal Investigator Faculty Sponsor

Sandra De Urioste
Co-Investigator Co-Investigator

****

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

ACTION TAKEN:

X 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. Endley 12/2012

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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 2015-2020 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 <u>each</u> 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

Questi on # 3 C ontinued…

[ ] 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	( )	( )	( )	( )	( )	( )	( )	( )	( )
As overnight outings	( )	( )	( )	( )	( )	( )	( )	( )	( )

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 <u>all</u> 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

Questi on # 6 C ontinued…

[ ] 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	( )	( )	( )	( )	( )

Questi on # 8 C ontinued…

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 <u>most often</u> 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 <u>second most often,</u> 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 <u>your level of activity</u> 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.

Questi on #13 C onti nu ed…

	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	( )	( )	( )	( )	( )

Questi on # 14 C ontinued…

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 <u>interested</u> in participating in <u>each</u> 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	( )	( )	( )	( )	( )

Questi on # 22 C ontinued…

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"	( )	( )	( )	( )	( )
"When planning for tourism, we can't be shortsighted"	( )	( )	( )	( )	( )

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 <u>tourism in your area/community</u>.

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

_____ Years

35) lease 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

Questi on # 38 C ontinued…

( ) $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; andprovide 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.

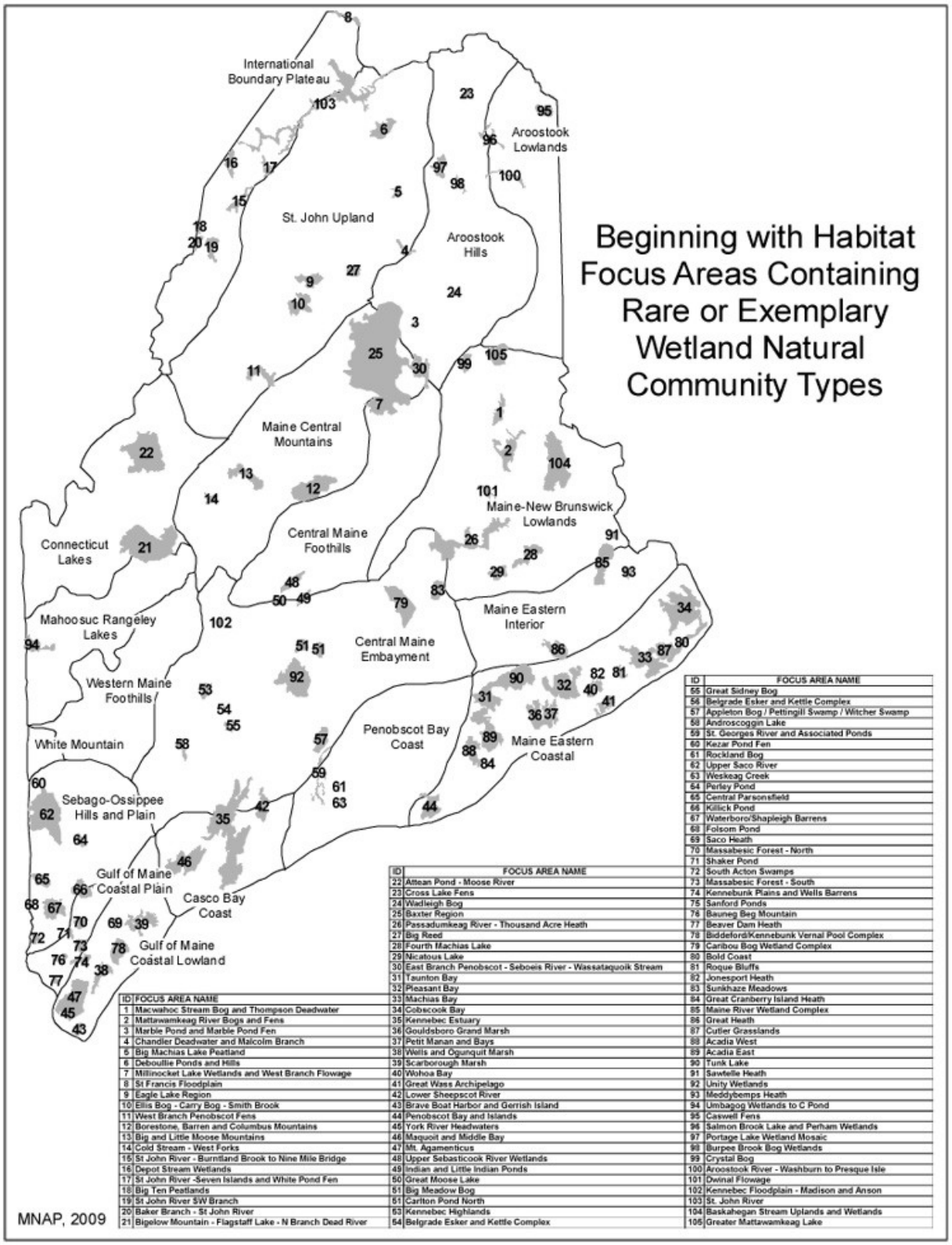
After reviewing high value plant and animal habitats – of which wetlands are key components - and undeveloped habitat blocks, biologists from the Maine Department of Conservation Natural Areas Program and Department of Inland Fisheries and Wildlife identified landscape-scale areas meriting special conservation 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: M



ID	FOCUS AREA NAME
1	Macwahoc Stream Bog and Thompson Deadwater
2	Mattawamkeag River Bogs and Fens
3	Marble Pond and Marble Pond Fen
4	Chandler Deadwater and Malcolm Branch
5	Big Machias Lake Peatland
6	Deboullie Ponds and Hills
7	Millinocket Lake Wetlands and West Branch Flowage
8	St Francis Floodplain
9	Eagle Lake Region
10	Ellis Bog - Carry Bog - Smith Brook
11	West Branch Penobscot Fens
12	Borestone, Barren and Columbus Mountains
13	Big and Little Moose Mountains
14	Cold Stream - West Forks
15	St John River - Burntland Brook to Nine Mile Bridge
16	Depot Stream Wetlands
17	St John River -Seven Islands and White Pond Fen
18	Big Ten Peatlands
19	St John River SW Branch
20	Baker Branch - St John River
21	Bigelow Mountain - Flagstaff Lake - N Branch Dead River

ID	FOCUS AREA NAME
22	Attean Pond - Moose River
23	Cross Lake Fens
24	Wadleigh Bog
25	Baxter Region
26	Passadumkeag River - Thousand Acre Heath
27	Big Reed
28	Fourth Machias Lake
29	Nicatous Lake
30	East Branch Penobscot - Seboeis River - Wassataquoik Stream
31	Taunton Bay
32	Pleasant Bay
33	Machias Bay
34	Cobscook Bay
35	Kennebec Estuary
36	Gouldsboro Grand Marsh
37	Petit Manan and Bays
38	Wells and Ogunquit Marsh
39	Scarborough Marsh
40	Wohoa Bay
41	Great Wass Archipelago
42	Lower Sheepscot River
43	Brave Boat Harbor and Gerrish Island
44	Penobscot Bay and Islands
45	York River Headwaters
46	Maquoit and Middle Bay
47	Mt. Agamenticus
48	Upper Sebasticook River Wetlands
49	Indian and Little Indian Ponds
50	Great Moose Lake
51	Big Meadow Bog
51	Carlton Pond North
53	Kennebec Highlands
54	Belgrade Esker and Kettle Complex

ID	FOCUS AREA NAME
55	Great Sidney Bog
56	Belgrade Esker and Kettle Complex
57	Appleton Bog / Pettingill Swamp / Witcher Swamp
58	Androscoggin Lake
59	St. Georges River and Associated Ponds
60	Kezar Pond Fen
61	Rockland Bog
62	Upper Saco River
63	Weskeag Creek
64	Perley Pond
65	Central Parsonsfield
66	Killick Pond
67	Waterboro/Shapleigh Barrens
68	Folsom Pond
69	Saco Heath
70	Massabesic Forest - North
71	Shaker Pond
72	South Acton Swamps
73	Massabesic Forest - South
74	Kennebunk Plains and Wells Barrens
75	Sanford Ponds
76	Bauneg Beg Mountain
77	Beaver Dam Heath
78	Biddeford/Kennebunk Vernal Pool Complex
79	Caribou Bog Wetland Complex
80	Bold Coast
81	Roque Bluffs
82	Jonesport Heath
83	Sunkhaze Meadows
84	Great Cranberry Island Heath
85	Maine River Wetland Complex
86	Great Heath
87	Cutler Grasslands
88	Acadia West
89	Acadia East
90	Tunk Lake
91	Sawtelle Heath
92	Unity Wetlands
93	Meddybemps Heath
94	Umbagog Wetlands to C Pond
95	Caswell Fens
96	Salmon Brook Lake and Perham Wetlands
97	Portage Lake Wetland Mosaic
98	Burpee Brook Bog Wetlands
99	Crystal Bog
100	Aroostook River - Washburn to Presque Isle
101	Dwinal Flowage
102	Kennebec Floodplain - Madison and Anson
103	St. John River
104	Baskahegan Stream Uplands and Wetlands
105	Greater Mattawamkeag Lake

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

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

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
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 addi- tion, 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 actives is snowmobiling, with 28.7% of the state participating. Sledding 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 participatin	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

NewEngland

Activity	Percent participatin	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 participating	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 participating	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

Activity	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

NewEngland

Activity	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 participatin	Number of participants (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 participating	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 participatin	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 participatin	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	390

Participation in Outdoor Sports (Individual and Team)

Maine

Activity	Percent participatin	Number of participants (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

NewEngland

Activity	Percent participatin	Number of participants (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=Individual

Type of Sport=Team

Activity	Percent participatin	Number of participants (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 participating	Number of participants (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