



State of the Park - 2015

by BSP Director Jensen Bissell

Once again, it is my pleasure to provide an update on the State of the Park to the Friends of Baxter State Park. The Park's mission is defined by six elements:

- Protecting Park Resources
- Providing Recreational Opportunities
- Conducting Exemplary Forest Management
- Maintaining Park Property
- Providing for Staff and Public Safety
- Managing Fiscal Resources

The Rangers, staff and Baxter State Park Authority work together to improve our success in each of these elements, to be sure the Park and Katahdin forever remain the "Mountain of the People of Maine."

The significant movement of rocks, soil and debris on the Abol Slide prompted the closure of this popular Katahdin-access trail in 2014 for the first time in more than half a century. During the 2015 summer

season, we are working on a relocation of the Abol Trail that will provide a safer and more stable foot tread to Park hikers in the future. Two Maine Conservation Corps trail crews began work on the construction of the relocation in late May and will work through the summer on this project. Volunteers are welcome! The steep terrain and thick vegetation will require a significant effort to complete the construction project, but in time we will have an enduring trail that will provide popular access to Baxter Peak for thousands of hikers. The new trail may emerge as one of the most popular routes to Baxter Peak, prompting the Park to reconsider parking accommodations at Abol Campground at some point in the future.

Although prompted by natural events, the Abol relocation will take its place in what I foresee to be a continuing effort to address serious concerns in the Park's hiking trail system through planned relocation projects. The institutionalization of hiking trail relocation efforts into our regular annual work plan will provide the Park the best and surest opportunity to successfully address the most serious sections of eroded and difficult-to-maintain fall-line trails in our system. Although it will take decades to accomplish, this time frame is in harmony with the thinking necessary to manage a large public trust like Baxter State Park. I believe Maine people will continue to enjoy hiking in the forest and mountains of the Park and that we should

do our best to address our most serious trail issues in a permanent fashion. We have completed many trail relocations over the years with recent significant efforts on the OJI and Marston Trails. This planning process will help ensure that this work continues in an organized, intelligent, and effective manner.



Baxter State Park has had a strong partnership with the Maine Conservation Corps for many years. That partnership grew this year when the Park began utilizing MCC trail crews for all of its trail projects, instead of an in-house trail crew.

- Photo courtesy of Baxter State Park

Our trail work this year will be accomplished entirely by Maine Conservation Corps crews. This is a significant change from our previous model employing trail interns hired and trained by BSP. The change in models will eliminate significant time commitments to training of interns and will

Trautmann Trail Improvement Initiative

Trail	Reconn	Flag	Eco Check	Constrctn start	Constrctn end	Est. Cost \$	GPS start	GPS end	Comments
Abol	2014	2014	2015	Jun-15	Sep-15	\$135,000			7100' of new trail construction to bypass Abol Slide
N. Brother	2015	2015	2015	Jul-16	Sep-16	\$50,000			Graded new construction to bypass fall-line eroded section below N. Brother. Requires spike camp.
Hunt Trail	2016	2016	2017	Jun-18	Jun-18	\$50,000			Eroded fall line sections between KS Falls and the Hunt Spur
Helon Taylor	2017	2017	2018	Jun-19	Sep-19	\$50,000			Relocate eroded fall line sections to graded trail
Saddle	2018	2018	2019	Jun-20	Aug-20	\$100,000			Explore options to bypass Saddle Slide
N. Traveler	2019	2019	2020	Jun-21	Aug-21	\$50,000			Explore options to replace fall-line section(s) with graded trail
Doubletop South	2020	2020	2021	Jun-22	Aug-22	\$100,000			Explore options to replace fall-line section(s) with graded trail
Doubletop North	2021	2021	2022	Jun-23	Jun-23	\$100,000			Explore options to replace fall-line section(s) with graded trail
Freezeout	2022	2022	2023	Jun-24	Sep-24	\$50,000			Relocate wet sections on old road to upland locations
Wass Lake	2023	2023	2024	Jun-25	Sep-25	\$100,000			Relocate extensive bog bridge section to drier location (south of L. Neso Strm)
OJI	2024	2024	2025	Jun-26	Sep-26	\$50,000			Relocate wet sections in first 1.5 miles from Foster Field

\$835,000

1. Initial reconnaissance of the listed trail projects (except the Abol Trail) will be completed in 2015/2016
 - a. more detail on geographic location, project scope, extent and urgency and estimated costs and logistics
 - b. project priority order may change as on-site inspections are completed
2. Additional projects are expected to be added to the list



Members of the Maine Conservation Corps moving a large rock while working in Baxter State Park.
– Photo courtesy of Baxter State Park



Baxter State Park carries out major trail relocations, like the one on Mount OJL in 2012 – 2013, to protect natural resources and reduce ongoing trail maintenance needs. Sometimes these relocations also create access to interesting new trail features, like this rock cleft near Old Jay Eye Rock that is quickly becoming a favorite spot for many hikers on the new trail.
– Courtesy of BSP Photo Files

allow the redirection of the Park's Trail Supervisor to sign maintenance, relocation project planning, trail inventory work, and volunteer program efforts.

We have also continued our efforts to review and revise the Park's organizational structure. We have worked steadily to review the Park's field and administrative positions to ensure that the description of employee positions matches what they actually do and that what they do matches the Park's needs. In this process, we have reviewed most of the positions in the Park's organizational structure and adjusted the job descriptions and pay ranges of numerous positions. We have worked very hard

to make sure that we have the right employees for the right jobs for and that they are compensated fairly for what they do.

One of the areas that has changed the most in recent years is the application of sworn law enforcement in the Park. The training required to acquire and maintain a Baxter Park Enforcement Ranger is significant. It involves substantial initial training through the Basic Law Enforcement Training Program administered by the Maine Criminal Justice Academy (MCJA), as well as regular refreshers, qualifications and reviews that our sworn law enforcement rangers must accomplish on an annual basis. The MCJA is a top-notch institution and provides the serious and comprehensive training necessary to conduct effective law enforcement in today's world. The graduates of the MCJA will conduct careers as sworn law enforcement officers doing almost exclusively law enforcement workexcept for BSP Enforcement Rangers, who will find that law enforcement duties will generally comprise 15-20% of their work, behind supervision of seasonal employees, maintenance of Park property, and providing recreational opportunities to visitors. In addition, for most BSP Enforcement Rangers, law enforcement work primarily involves the enforcement of Park Rules and Regulations.

This dichotomy results in some tension as our Rangers try to keep their enforcement skills sharp while spending considerable time at non-law enforcement work. To address this concern, we have finalized a Baxter Park Ranger position. This position will have a limited amount of training at the MCJA, and will be authorized only to issue summons for violations of Park Rules and Regulations. The position will not be issued firearms or any component of the continuum of force and will not have arrest powers. Eventually, I foresee the application of a BSP Enforcement Ranger to 80% law enforcement duties including the patrol of Park trails and campgrounds both in winter and summer.

Of course, the reason we need rangers and staff is because we have a lot of visitors to the Park. After Park use reached a nadir in 2005, Park visitation has been generally increasing at a modest rate. The rate of increase in Park visitation however, pales in comparison to the rate of increase in Appalachian Trail (AT) hikers that have

come to the Park each year. For decades, the Baxter State Park Authority has generously hosted the 10 miles or so of trail that comprise the northern terminus of the Appalachian Trail. It is important to note that unlike almost all other segments of the AT, Baxter Park has no formal commitment to a partnering agreement with the National Park Service (NPS) – we simply have ac-



The Park's thru-hiker campsite, The Birches, is currently available to for up to 12 thru-hikers per night without advance reservations.

– Photo courtesy of Baxter State Park

commodated the AT hikers. Thirty years ago, only a handful of AT hikers, almost entirely northbounders, made it to Baxter Park and Katahdin. In 1991, we registered 359 AT hikers at Baxter Park. In 2014, this number had grown to more than 2,000 AT hikers.

A decade or two ago, AT hikers seemed to be focused on the challenge, spiritual nature and largely solitary experience of their hike. For many of today's AT thru-hikers, the nature of the experience is much different – more centered on social experiences and relationships with other hikers.

We have been discussing our concerns regarding the growth in AT use with Appalachian Trail Conservancy (ATC) and AT-NPS personnel for a number of years. Changes in administration in these organizations has slowed progress. Our concerns with AT use are not limited to the increasing numbers of hikers, but are also centered on emerging patterns of behavior in a segment of the long-distance hiker community. This behavior is increasingly trending toward larger group use, a feeling of entitlement to the Hunt Trail and Baxter Peak and behavior that is increasingly contrary to wilderness ethics, respect for the environment, Park Rules and Regulations and other non-AT hikers. In an effort to spur some focused discussion, I encap-

ulated our concerns in a letter sent to ATC and NPS officials. We completed a teleconference call in early March. We remain concerned about thru-hiking trends and we are working on formulating solu-

SFMA south of Webster Stream can be accessed from the Park Tote Road via the Lynx Road, about 1 mile west of Trout Brook Crossing. The second change involves the regulations regarding aircraft in the Park.



Jonathan Lemberg, Baxter State Park's full-time, seasonal AT steward in 2014, stationed at the kiosk where the AT crosses the Park boundary.

– Photo courtesy of Baxter State Park

tions that will protect the resources and visitor experience of the Park in an effective and timely way.

Over the past six years we have made significant improvements in our efforts to train the field staff in wilderness first aid. Drs. Steve Diaz and Matt Scholl of Maine Medical Center in Portland now share duties as Baxter State Park Medical Directors. These doctors volunteer their services to help the staff in the development of training and treatment protocols as well as providing post-incident review. In addition, the Ranger staff can contact the Med Directors during an active rescue to get pertinent medical advice. In 2014, with the help of medical student Chris Welker, we updated and reviewed our extensive search and rescue records. Chris worked through the 2014 summer to enter the pertinent data for over 20 years of incident records into a database format. This database allows us to look at the data objectively for trends that could help us provide better preventative information to visitors and to be more prepared in the case of injury or medical events in the backcountry.

We are now in the final stages of the process to effect changes to two parts of Park Rule #5, which governs the use of Vehicles and Transportation in the Park. The first change will broaden the roads available to bicycle use in the Park to include roads in the Scientific Forest Management Area (SFMA). Roads in the portion of the

The rule change seeks to clarify the definition of “aircraft” in the Park to include unmanned aerial vehicles, more commonly referred to as “drones.” The rule changes should go into effect sometime during the summer of 2015.

Lastly, no discussion of the State of the Park would be complete without some mention of the power of change. Baxter Park is a large, public trust governed by the trust communications of Percival Baxter, who died over 45 years ago. The creation of the Park has helped the Park become a large landscape that is influenced almost entirely by natural forces, including some very significant events. Think of the 1977 fire, the 1980s budworm epidemic, the growth of Park forests since the cessation of logging in the 1960s, and more recent events such as the changes from the tornado in the Webster area in 2013 and the landslide on the Abol Trail in 2014. Being able to watch and learn from natural disturbance



A recent revision to Park Rule 5.5 broadens the roads available to bicycle use in the Park to include roads in the Scientific Forest Management Area, as well as the Dwellley Pond Trail. Shown here are BSP staff Jensen Bissell, Stuart Guay, Morgan Taylor, and Jean Hoekwater. – Courtesy of BSP Photo Files

and change in an unmanaged landscape is part of the value and excitement of wilderness. As managers of the Park, what we do will never change, but how we do it will change constantly. Our policies to protect the Park's resources and provide recreational opportunities must change constantly to adapt to new attitudes, technology and trends in society and our approach to wilderness and recreation in the outdoors. Drones, GPS availability, tablets and smart devices, social networks and, outdoor gear and clothing, are just a few of the areas where technology is impacting how Park visitors expect to interact with each other and nature.

As our visitors arrive at Park gates with changing expectations, natural and social forces are continually at work to change the landscape around the Park. Populations of the Spruce budworm, a small caterpillar endemic to spruce-fir forests, increase to epidemic levels every 30 to 40 years in Maine. We are likely to see this happen again in the next few years. The severity of the outbreak and the levels of mortality to fir and spruce in Maine forests is currently under debate, but there is little doubt that the budworm will become a noticeable change agent in northern Maine in the near future.

The end of a century of papermaking in the towns of Millinocket and East Millinocket have left the Katahdin economy in tatters. The road ahead, described in straightforward terms in a nine-page letter from development advisory CZB, Inc. to the Town of Millinocket, will be difficult. CZB, Inc. suggests that constant, and often difficult changes must be implemented in the communities of the region in order to return to prosperity. A proposal to create a national park east of Baxter Park continues to gather momentum. The pattern of land ownership around the Park, once comprised of a few corporate and family entities with a focus on long term forest management, is now a diverse mix of smaller, more fragmented ownerships with a range of long and very short management timeframes.

Although these changes are part of the management landscape for Baxter Park, they all pale in comparison to the “Mother of All Change” – Climate Change. Climate Change is the single largest challenge facing our population today and it holds the potential to change

life for every one of us. Climate change has emerged as one of the most urgent and important issues of this century.

There has been a considerable amount of scientific time and effort focused on the issue of climate change, combined with an equally considerable amount of political and social debate. Significant research has been directed towards evaluating the potential and likely effects of climate change on natural and social systems. A clear early result of this research is an understanding of the deep complexity of climate and the natural systems that depend upon it. While a clearer understanding of some of the hemispheric changes associated with climate change is emerging, local or regional changes cannot be predicted with certainty. Research has suggested that the Maine climate will have warmer, shorter winters with less snow. Other research suggests that disruptions to the Gulf Stream may lead to deeper, colder winters in Maine. Climate research has also suggested a general increase in the occurrence of the intensity of storms¹. Research also suggests that increased storm intensities may be accompanied by extended duration of weather patterns leading to drought, flooding or continuing heat or cold temperatures².

The physical and biological relationships of our landscape are so overwhelmingly complex that future conditions can be predicted only in the most general sense at this time. The uncertainty of climate change effects and outcomes may continue for some time.

Regardless of the uncertainty, climate change has the clear potential to significantly, perhaps drastically, change the arrangement and interconnections of plant and animal communities, the arrangement and presence of species and the recreational and economic opportunities available to Park visitors in particular and society in general.

For Baxter State Park, a significant change in climate would present some obvious risks. Warmer average temperatures accompanied by less abrasive winter weather would put unique, rare and endangered plants and plant communities at

risk (examples: diapensia, sedge meadow and windswept alpine ridge communities). Shorter winters, including lower average snow depth and shorter duration of snow cover would result in changes in species competition regimes (example: decreasing moose populations, increasing white-tail deer populations, increases in non-native invasive species). Longer growing seasons would have consequences on recreational use of the Park as well. Summer camping seasons could be extended. A decrease in rime ice coupled with a longer growing season on Katahdin's Tableland could lead to an expansion of krumholtz communities into small forest communities. Viewsheds would diminish. Higher storm intensities could increase impacts from trail erosion or road washouts. Conversely, longer periods of unchanged weather patterns could lead to extended periods of very dry or very wet weather, changing natural wildfire regimes or affecting building maintenance strategies.

These are some of the possible effects of climate change on our landscape and outdoor recreation regimes, but the fact is that at this time we cannot predict the actual outcomes with any certainty. The complex and infinite connections that exist in the biological systems and communities that cover our landscape are intimately related to climate. We recognize that thresholds of major change and specific and succinct triggers that can lead to cascading effects likely exist, but we cannot identify them or evaluate how close we are to them.

Consequently, attempts to list possible risks and apply according adaptations would seem to be an ineffective approach. The most valuable adaptation is the adaptation of existing management systems to an environment that will be changing at a more rapid rate than previously experienced. For example, here is an incomplete list of some actions we should consider that could help the Park identify and adapt to change in an efficient and effective way:

- Develop effective monitoring systems to accurately and objectively measure or determine actual changes occurring on the Park landscape.

- Adapt policies to administer the use of the Park based on current landscape conditions and not dates.
- Develop plans for alternative means of transport of materials and personnel in the Park.
- Inject variability into seasonal position lengths to reflect landscape conditions and recreation demands.
- System flexibility to respond to extreme weather events.
- Stockpiling of materials and supplies (gravel, culverts, bridge sections).
- Refine information and education techniques to address continuing change in resource and social protection issues.

These actions are things the Park can, and should, begin to do now, as they will help protect the Park regardless of what actual outcomes of climate change emerge in the coming years.

Currently, the Park is working to launch a cooperative project to evaluate the potential impacts of climate change to the Park and outline adaptive management options. The project is organized by the Clean Air Task Force, and includes support and participation from the Appalachian Mountain Club, and Friends of Baxter State Park along with other organizations. Funding for this important project is uncertain at this time.

Instituting and adapting to the changes that lie ahead will be challenging and will require careful thought and appropriate pacing as they will change structures that have not changed in decades and that people are comfortable with, but addressing climate change will require all of us to leave our comfort zones and get comfortable with adaptation.

One thing is certain: the Park and its natural grandeur will endure. We must do all we can to be sure that our thoughtful and protective stewardship endures as well.

"It's not the strongest of species that survives, nor the most intelligent that survives. It is the one that is the most adaptable to change."

– Charles Darwin

1. <http://www.theclimatechangelearninghouse.org/CLIMATECHANGEIMPACTS/CHANGESSTORMINTENSITYFREQUENCY/Pages/default.aspx>
 2. <http://journals.ametsoc.org/doi/abs/10.1175/JCLI-D-10-05035.1>

