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BAXTER STATE PARK

1999

ANNUAL REPORT

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r, Inland Fisheries & Wildlife

THOMAS DOAK
Director, Maine Forest Service

MAY 19 2000

Respectfully submitted:

IRVIN C. CAVERLY, JR.
Director, Baxter State Park
May 1, 2000

TO PROTECT AND PRESERVE

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A. DIRECTOR'S 1999 SUMMARY



DIRECTOR'S 1999 SUMMARY

After fulfilling a busy week of public relations, reservations and listening to people's ideas on how to manage BSP, it was a refreshing break to get to the Park by snowmobile, spend some time on snowshoes and experience the peace of the North Maine Woods. So was the start of the 1999 season; year filled with challenges, experiences, but most of all gratification. The guidelines, policies and assignments given to the Resource Managers and staff were expedited with professionalism as verified in the following pages of this the 1999 Annual Report. The people of Maine got their money's worth by the efforts of Park staff at all levels. The support of volunteers, contractors and other agencies are a major contribution to the success of our Park. BSP has provided public services and maintained the integrity of resource protection as we have fulfilled the agendas outlined. In addition to the many projects reported on in the following pages your Director has corresponded with 459+ individuals on Park matters. Administrative staff has communicated with approximately 1000 by e-mails above and beyond their routine letter writing responsibilities. Roxie McLean, Secretary to the Director, in putting the final touches on each of the 459+ correspondences mentioned above maintains an active inventory of each person and each issue addressed. That inventory serves a couple of purposes. First it is a great reference guide when we need to look up letters for it very quickly identifies the date of said correspondence. Secondly it is most helpful to me on a yearly basis in doing a thorough job of reporting to you by identifying topics, so with this background it is with a great deal of pleasure that I summarize key important and unique issues addressed in 1999.

Early on in the year Kenyon Howes working towards his Eagle Scout badge, the son of employees Jean and Bob Howes, volunteered to replenish, clear and sign the Rocky Pond ski trail. This involved a lot of initiative and hard work on Kenyon's part and we appreciate the effort that he put into it. With that work and work accomplished by Lester Kenway with the help of staff and volunteers, there is a loop trail from Togue Pond to Rocky Pond, crosses the road to Round Pond and comes back on to the Roaring Brook road near Helon Taylor Pond. Another nice day use opportunity whether it be cross-country skiers in winter, winter parties taking a shortcut to Roaring Brook from Round Pond or hikers such as yours truly who enjoy a short hike that is readily accessible without going into the interior of the Park when schedules are tight.

In 1999 BSP employees were most supportive of their Director as he did his best to cooperate and assist the crew from Huey Film Productions. This project is a movie about our natural resources and heritage. It is a major production that Huey has been working on for some time. I understand its content and it covers many subjects and areas with BSP receiving more than its share of attention within the film. Huey joins us in hoping that it will be a document on information education and not a drawing card which promotes and impacts the Park with more numbers than our capacities can handle. During the year Bill Silliker worked on and completed his piece entitled *Nature at Peace*. The emphasis of that story is on the history of Governor Baxter and his Park and serves as an information education tool. A later production is expected to be completed by Jeff Dobbs in 2000.

On numerous occasions during the year I personally have had the opportunity to work with other agencies on policy related to issues – Fish & Wildlife, Maine Forest Service, Department of Transportation, Human Resources and the Bureau of Lands and Parks. I have served as an advisory member at the request of Tom Morrison on the West Branch Corridor Advisory committee; also served on the Advisory of the Maine High Adventure Scout Council. Frequently I have been invited to communicate and work with private organizations such as the Appalachian Trail Conference, Appalachian Mountain Club, etc. The Maine Army National Guard has been most supportive when called upon and for the search & rescue assistance they provide, our thanks to all participants of that unit, specifically to their Commander Col. Rod Carmichael and Major David Smith.

The BSP Management Plan five-year review is anticipated to be complete by January 1, 2000. The Park continues to review details according to the donation policy. In the Administrative Services section of this report Roxie McLean, who manages that account, has included her report. Quite frequently throughout the year we are questioned on many of our policies and issues to clarify or provide copies. Some of them are controversial; some are merely seeking information. Predator control, Native American interest, ADA, forest fire policy, search & rescue policy, group sites and use of bicycles within the Park are among a few issues of which I have responded during the course of the year.

During the year BSP lost numerous friends who during their life span had many connections to the Park as users, friends, supporters and boosters. Bob Mott of Millinocket was one who fit all categories above. He was one of the original members of Chapter 111 of the Civil Conservation Corps. On several occasions just months prior to his death Bob had asked on behalf of the CCC's if there could be some recognition of the hard work accomplished by that group in the early 30's, work that resulted in an access road to BSP, portions of the tote road within the Park, work on the AT throughout Maine, CCC camps at Katahdin Stream, a cable bridge at Katahdin Falls and a dam at Katahdin Stream. Bob clearly understood that the Park could not be used as a memorial on any subject and was most appreciative when we were able to include on our entrance signs references to the CCC's and the contribution they made to the Park. Although I personally had an opportunity to review the work with him, unfortunately he passed away before the signs were complete and erected. His son, daughter and wife assisted me in assuring the task was accomplished in the year 1999.

Another issue of significance in 1999 involved the decision by the BSP authority to close for one season effective spring 2000 an area identified as the Abol Scout area as well as some sites on Matagamon and Webster that have been used for a number of years exclusively by Maine High Adventure. In a legal review by the Authority's Counsel, Paul Stern, it was determined that exclusive use by any organization or interest was inconsistent with the constitution. At the time that the Authority asked that we close these sites they also charged the BSP Advisory (PUC) to review the area of the Abol Pond facility and make long term recommendations.

As the years go by and long term users of the Park start to dwindle in number, it is interesting to note that the following people continue to visit each year as opportunities and health allow and in the event that they can't come visit the Park, they keep in contact such as Dr. David O'Toole from Clinton, MA, Ken Whitmore from Houlton, ME, David Gathman from Montoursville, PA, Frank and Emily Guertin from Stoughton, ME, Earl and John Shaffer from PA. (Interesting to note Earl was the first person to hike the AT and followed with numerous hikes over the years.) Although Bill and Debra Irwin are busy with their schedules, they keep in touch. Now that we have covered the old timers' list (whoops, sorry Bill) I am delighted to report that many of the 100,000 people who visit the Park each year and returnees who maintain interest, are drawn back to BSP by the magnets of its mountains and its peaceful brooks and woods.

Our thanks to Gail Chase, State Auditor, and Dick Foote, Deputy Auditor, for their annual reviews of our in-house procedures. Their council and recommendations are most appreciated and in one more way the resources of BSP are protected.

On numerous occasions during the year, I am drawn away from the Park for Park duties in other parts of the State. Most of the time it is within one sense or another for the purpose of resource management. However on occasion as has happened five times in the year 1999 I have appeared before the Legislative Committees to testify in opposition to LD's which would negatively impact BSP. Such was the case of LD's 853, 997, 1088, 1165 and 1699.

In the area of personnel you will note that numerous people were transferred, promoted or hired in 1999. There are significant appointments which I would mention at this time. Don Mansius, Director of MFS, has returned to other responsibilities in the MFS. We extend our appreciation to him for the attention and commitments he made to BSP during his tenure as Acting Director. Tom Doak, who has served as Acting Director for MFS in the past, is its permanent Director and continues to be very much interested in the Park and most helpful when deliberating Park matters. Malcolm Coulter, who had served BSP for 1-1/2 years as Business Manager has accepted numerous responsibilities and challenges with another agency. That position has been filled by Elizabeth Johnston of East Millinocket. Meg Ounsworth has filled a recently new position as Park Naturalist Assistant. Under contract services Bruce Grant has been most supportive in keeping our computers on line and assuring that we have the latest technology for the jobs that need doing.

Although we are happy for Col. Malcolm Dow and offer our congratulations in his retirement as Chief of the Maine State Police, we miss him because he has been a user, neighbor and friend of BSP for many years. We shall also miss Linn Spalding, formerly Trust Officer with the Melon Co. Linn could always be depended on to respond to questions or issues whether they be from the Director of BSP or the Chair of the finance Committee from the Advisory. We wish her luck and hope that she and her family will continue to visit and enjoy the resources of BSP. Another friend of the Park corresponded with during the year was Norm Dodge who just retired from the National

Park Service after a career Norm started with BSP as Assistant Campground Ranger at South Branch Pond in 1964. Harry Hanscom also returned to Katahdin trails in 1999 and is the person that was responsible in initiating a 60th anniversary gathering for Donn Fendler. I was honored to participate in a great day of festivities at Katahdin Stream Campground. His friend Fred Eaton had searched for Donn and he and Betsy were very much a part of the day's events.

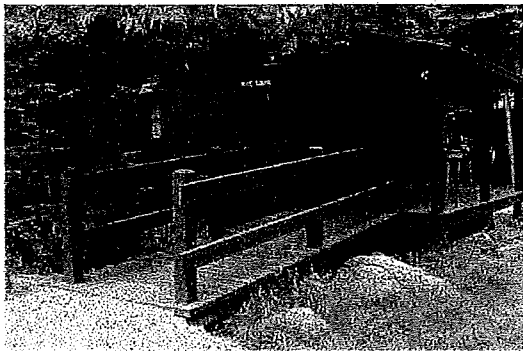


Rod Hanscom, Advisory member, has served as Chair of the Road Inventory Maintenance Committee

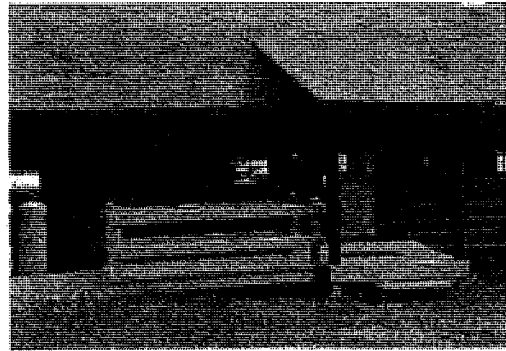
The Authority met on numerous occasions during the year to conduct their business. Budgets were reviewed, approved and implemented. Bill Gormley and Jerry Worcester of DOT were most helpful in assisting us with the tote road maintenance needs. Dick Anderson of the IAT and I had a couple of discussions. Although the dialogue is pleasant there are still issues or interpretation that need to be clarified between BSP policy and the IAT hikers. Workshops with the Boston Trust officers have been productive throughout the year. Steve Campbell, representing the Millinocket and East Millinocket snowmobile clubs, met with me early in midsummer to discuss the possibility of grooming trails on the BSP tote road. Although I appreciate their interest and understand desire for smoother trails, it is important that I reaffirm each year this issue arises that the portion that is open to snowmobiling is with the understanding that the people use the Park on its own terms. Grooming is not an option for we have no desire to increase snowmobile use or speeds that could be associated with groomed trails. This is a long standing policy that has been in place since snowmobiles were allowed to use the tote road back in 1982. Our thanks to Abbott and Nancy Meader from Colby College area who each year assist us with volunteer work. This is significance in the fact that to keep Pockwockamus Rock just outside the entrance to the Park sharp and in good shape according to permission

granted by the landowner, DOT State Aid road managers and BSP. They also replenished our Headquarters sign which required a lot of time consuming fine art work. Thanks folks, you did a great job.

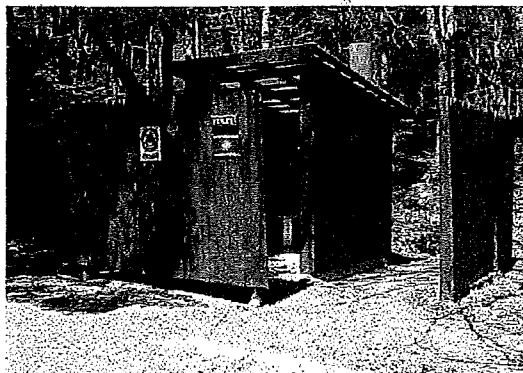
In early October Jack Andre, investigator for the National Park Service, reviewed an ADA complaint filed by Gordon McCauslin of Millinocket. We appreciate Jack's visit to the Park and the time he spent reviewing Park facilities and enlightening us on the issues of immediate concerns. He and his agency followed up with a detailed report and it is our goal to accomplish all suggestions offered by September 1, 2000.



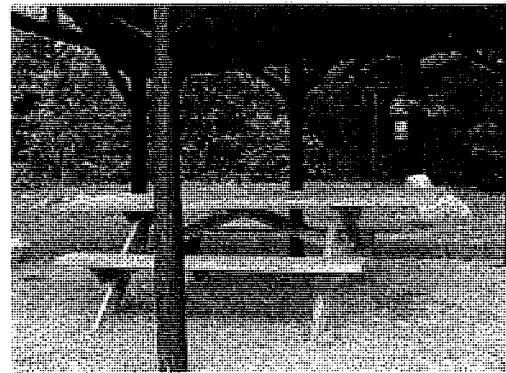
Accessible cabin at Daicey Pond



Kidney Pond Library Ramp



Kidney Pond Day Use Area



Accessible Picnic Table

In closing I would make mention that it has been past practice for many years for Mary Baxter White to visit Katahdin Stream Campground. She blessed the Park with her presence. I hope she doesn't mind my reporting that she is 98 years of age, still camps in a lean-to at Katahdin Stream and shares some precious time with yours truly and Park staff whenever we have the opportunity to visit with her. She is a wealth of history regarding the BSP story and has been a frequent user of the Park throughout her life whenever the opportunity arose. In speaking of Mary, I take this opportunity to thank Rupert, her son, and his wife Ruth for courtesies extended to this Ranger on a very special day at the Maine Coast. I have known for a long long time that home fries, trout and fiddleheads when cooked over an open fire are hard to beat, but I am here to tell you that lobster, clams, corn on the cob and a swim in a crystal clear portion of the Atlantic Ocean gives that North Maine treat a hard rub. A ride on the White's boat (friends of Rupert and Mary's, no relation) was a delightful trip in itself. Jan and I will never forget the hospitality and friendships enjoyed with the Whites and their families during that day.

This has been a good year. We look forward to the new millennium and I continue to be grateful to represent and manage this gift so cherished by Maine people.

B. OPERATIONAL HIGHLIGHTS AND OVERVIEW

I OVERVIEW

The winter of 1998-99 saw early rains and thin ice until nearly February, giving Park Rangers a narrow "window" to resupply remote campgrounds (Chimney Pond and Russell Pond) by snowsled. There were eight search and rescue incidents on Katahdin and one rescue at South Branch Pond from January to March. Trail Supervisor Lester Kenway with assistance from volunteers and Rangers opened the new ski trail from Round Pond to Rum Pond and the Roaring Brook road. Major winter projects included the installation of 9000+ feet of paneling at the Abol Crew camp. Park Rangers hauled in five canoes to outlying ponds (Lower Fowler Pond – 2, Long Pond – 2, Six Ponds – 1) by snowsled for public rental after ice out.

In April Park Rangers opened the Park tote road from Togue Pond to Matagamom Gate using a Maine Forest Service bulldozer. The spur roads to Daicey Pond, Kidney Pond, Nesowadnehunk Field, and South Branch Pond were also cleared of snow in April to facilitate road usage by the May 15th campground opening. The old East Branch gravel pit was landscaped in April.

Major accomplishments completed in 1999 include:

1. New disability-friendly toilets were installed at Abol Field, Katahdin Stream, Roaring Brook, Daicey Pond, and Kidney Pond Campgrounds.
2. A large septic system was installed at the Abol Field crew camp and the grounds were loamed, seeded and mulched.
3. A new septic system was also installed at the new SFMA facility on the Hemlock road in T6R10.
4. A search and rescue transport sled was built in the Millinocket garage for winter search and rescue activities.
5. A new radio transmission building was built on Burnt Mt.
6. Park personnel were involved in 41 search and rescue incidents in Baxter State Park. There were no fatalities in 1999!
7. 208 miles of trails were cleared of blowdowns and brushed out and 42 miles of trail were repainted. 2523 feet of bog bridging was laid out to protect both the hiker and the environment.
8. The Rum Pond trail was upgraded from a winter ski trail to a summer hiking trail.
9. The BSP tote road was improved by a major ditching effort to enhance better drainage (20+ miles).

10. Four bridging projects were completed. They include:
 - a. Abol Stream Trail – 22 feet long
 - b. Russell Pond Trail – 15 feet long
 - c. New cedar crib abutment was constructed on north shore of Trout Brook at the Trout Brook Farm Campground.
11. Erosion control work on the Cathedral Trail, Chimney Pond Trail, Hunt Trail, South Turner Mt. Trail and Helon Taylor Trail

The spring and summer of 1999 were unusually hot and dry. A fire ban in outlying campsites was initiated in May, the earliest ever. Temperatures were in the 90's from May to September. This long mild summer caused an increase in day users and hikers. The opening of Togue Pond gate at 5 A.M. to enable early starts for hikers in the cool of the day helped minimize fatigue and serious injury.

The weather turned wet in September. Chimney Pond Campground had 15" of rain from September 10-17 and 18 ½" of rain from September 10-22. Many Mt. Katahdin trails were closed due to flooding during this time frame. Wassataquoik Stream quickly reached flood stage and the Russell Pond Campground was closed for a week. Hikers from Russell Pond were shuttled by Park staff from South Branch Pond to Roaring Brook.

October was colder with more snow than November and December which were unusually mild. There were two major snowstorms before October 15th. Mt. Katahdin trails were closed early because of heavy snow and ice accumulation. This created difficulty with late Appalachian Trail hikers.

The fall months showed heavy hunting activity in T6R10 and T6R9. One lost hunter was safely found and returned to his party on November 26, 1999. A week long search for two deceased infants in T6R9 along the Freezeout Trail was terminated due to snow conditions and sketchy information.

The Carry In, Carry Out program showed a slight decrease in trash volume with 9.24 tons hauled out of the Park in 1999. The 1998 tonnage was 9.27 tons.

A total of 201 volunteers gave over 6213 hours of service to protect the resources of Baxter State Park. Volunteer search and rescue personnel contributed over 176 hours covering the search and rescue needs of BSP during busy summer weekends.

Animal problems in the Park were minimal. Five nuisance raccoons were live trapped in two campgrounds (Roaring Brook and South Branch Pond) and relocated to a remote area of the Park.

II SAFETY

Baxter State Park has an active safety program. Noteworthy activities in 1999 include:

1. Replacement of the Trout Brook footbridge cribbing on the north shore of Trout Brook.
2. Replacement of 25 aging picnic tables.
3. Replaced old steps and platform of the Abol woodshed.
4. Replaced old steps for Administrative Camp woodshed.
5. Replaced steps at Daicey Pond office.
6. Chainsaw safety orientation and training for new employees was conducted by Trail Supervisor Lester Kenway.
7. Old bog bridging was replaced with new bog bridging at Whidden Pond
8. 2523 feet of bog bridging was placed on wet sections of Park trails.
9. Safety is the first topic of discussion at Park Ranger meetings.
10. Park Rangers replaced damaged culverts and removed numerous wind thrown trees on 50 miles of Park tote road.
11. Trail Crew personnel cleared 153 miles of blowdowns on Park trails for safer hiking.
12. All campsites were inspected for fire safety.
13. Bunkhouses, lean-tos, cabins, picnic shelters, tables, hand railings, steps, stairs and footbridges are inspected for serviceability and safety.
14. Propane lights and appliances are cleaned and inspected annually.
15. All wood stoves and chimneys are checked and cleared of soot and ash.
16. Medically and technically trained MASAR Search and Rescue teams (Mahoosuc, Wilderness, Lincoln) covered busy summer and fall weekend S&R activities. This beneficial assistance lessens injury risk and fatigue to Park staff.
17. Togue Pond gate was opened at 5 A.M. during the summer to facilitate earlier and safer hikes on Mt. Katahdin.
18. Boats, canoes and personal safety devises are checked for safety and serviceability.
19. Park visitors are informed daily on weather and mountain hiking conditions.
20. Handrails were added to numerous toilet facilities to make them safer for those with disabilities.
21. Forty-two miles of trail were repainted to assist hikers to stay on marked trails.

III PUBLIC RELATIONS

1. Baxter State Park Gatekeepers, Campground Rangers and Park Rangers made over 95,000 contacts with public users.
2. The Trail Crew "Mt. Patrol" greets and assists hundreds of hikers on Mt. Katahdin during the busy summer months.

3. Baxter State Park employees assist the public by rendering numerous services that include: shuttling hikers, delivering messages, mail, A.T. packages and minor vehicle repairs as well as jumpstarts. Vehicles are commonly pulled out of ditches. Major and minor first aid is rendered to campers and hikers. Trail information and weather conditions are daily forwarded to hikers and campers.
4. Park Rangers assist numerous winter parties by packing ski trails and hauling equipment of fatigued users to roadside locations.
5. Togue Pond Gate opened at 5 A.M. to accommodate early starts for Mt. Katahdin hikers.
6. Reservations for day use parking were booked at Roaring Brook, Abol and Katahdin Stream Campgrounds.
7. The Chief Ranger was involved in various speaking engagements in 1999. These include:
 - 1/25/99 – USDA Awards Banquet, Houlton, ME
 - 2/25/99 – Hichborn Middle School, Howland, ME
 - 4/10/99 - Maine Bowhunters Annual Banquet, Brewer, ME
 - 4/17/99 – Easton Trailblazers, Easton, ME
 - 4/21/99 - North Maine Woods Spring meeting, Presque Isle, ME
 - 4/24/99 - Woodland Wanderers, Wilton, ME
 - 8/25/99 - Kidney Pond Camps, BSP
 - 9/11/99 – Maine Public Service Company Annual Banquet, Presque Isle, ME
 - 9/18/99 – International Masonic Supper, Washburn, ME
 - 9/24/99 - Multitown Firefighters Supper – Sherman Station, ME
 - 9/25/99 - Maine Search and Rescue Annual Training Supper, Newry, ME
 - 10/28/99 – Millinocket F.O.R.M., Millinocket, ME

IV TRAINING

All new employees receive training in Augusta during their first year of service. Most training is done either during the winter months or in June during times of lower public use. Training in 1999 included:

- February 13-16, 1999 - Wilderness Rescue Search & Rescue training at Chimney Pond
- March 5-8, 1999 - Mahoosuc Rescue Team training at Chimney Pond
- March 19, 1999 - Incident Command System at Park Headquarters. Instruction was by Maine forest Service Ranger V Harry Doughty who has extensive experience as an incident commander at a national level.
- June 3-4, 1999 - Solo Wilderness Medicine at Kidney Pond Camps. Attending were new Campground Rangers, Campground Attendants, Trail Crew members and others needing recertification.

- June 3-4, 1999 - Bloodborne Pathogens training at Kidney Pond during the evening hours (6:30-9:30 P.M.). This training is for new campground personnel and Trail Crew members.
- June 5, 1999 - Intermediate Chainsaw Safety training with Mike Thurlow, a certified professional logging instructor. This training was for Park Rangers and returning campground personnel.
- June 7, 1999 - Spring meeting. An overview of Park operations and policies for all employees.
- June 8-9, 1999 - Chainsaw Safety Training for all new campground and trail maintenance personnel. Instruction by Lester Kenway, BSP Trail Supervisor.
- June 23, 1999 - Firearm training and qualification of Park Rangers by Warden Norman Lewis and Andrew Glidden of the Dept. of Inland Fisheries & Wildlife.
- October 24, 1999 - Forklift operation and safety training by Dept. of Transportation personnel for Park staff who will be operating the new forklift.

V SEARCH AND RESCUE OPERATIONS

There were no fatalities in Baxter State Park in 1999. However, a total of 41 search and rescue incidents were reported and aid rendered by Park personnel. These include:

<u>Date</u>	<u>Location</u>	<u>Name</u>	<u>Injury/Event</u>
1-06	Saddle Trail/Katahdin	Rob Hartley	Snowsled evacuation
1-31	Saddle Trail	Frederick Martin	Possible ankle fracture/ Sprained right knee
2-5	So. Branch Pond	Kathy Kurtz	Scalding of feet w/boiling Burn to foot
2-6&7	Mt. Katahdin	Bowen Party	Winter overnight on Katahdin
2-13	Mt. Katahdin	Mike Williams	Left knee injury while ice climbing
2-14	Mt. Katahdin	Fred Dillon	Right knee injury while ice climbing
2-17	Mt. Katahdin	Andy Selters	Fall on Cilly-Barber route

2-25	Chimney Pd.(Kat.)	Janet Scholl	Influenza/hailed out by sled
3-21	Mt. Katahdin Kristopher Guyot, John Burns, Colby Smith, Jediah Porter, Andrew Williams	5 lost climbers	Katahdin Stream Ravine
6-12	Chimney Pd. Trail/ Katahdin	Guylene Arseneault	Sprained knee
6-12	Roaring Br. Cmgrd.	Melissa Lizotte	Dehydration, bloody vomit
6-12	Helon Taylor Trail/ Katahdin	Deen Clark	Dehydration, fatigue, nausea
6-13	Helon Taylor Trail/ Katahdin	Scout Troop #57 Millinocket	Stranded without flashlights and water
6-18	Chimney Pond Trail/ Katahdin	Jessica Ferris	Ankle injury
6-21	Daicey Pond	Debbie Hunter	Head laceration
6-21	Chimney Pond Trail/ Katahdin	Ms. Teasenfitz	Exhaustion
6-26	Howe Brook Trail	Adkins (youth)	Cut right foot/dislocated thumb
7-5	Hunt Trail (Kat.AT)	Zois McKinney	Ranger assisted hiker down
7-7	Mt. Katahdin	Mike Love	2 ankle injuries
7-15	Hunt Trail (Kat.AT)	Milford Leavy Jr.	Dehydration
7-20	A.T.-So. of Daicey	John Foley	Lost hiker
7-22	Ledge Falls	I.C.Caverly, Jr.	Concussion
7-28	Hunt Trail (Kat.AT)	Elizabeth Kennedy	Fractured wrist
8-6	Hunt Trail (Kat.AT)	Win Crandall Party of 4	Stranded w/o flashlight in rain
8-12	Owl Trail	Camp Kieve (3)	Lost persons
8-20	Hunt Trail/Kat.Str.	Christine Capetta	Dehydration/hypothermia
8-25	Chimney Pd. Trail (Kat)	Elizabeth Broderick	Sprained right knee

8-26*	Barren Mt.	Virginia Lang	Lost person
9-3	Hunt Trail (Kat.AT)	Marc Grenier	Torn ligaments-right ankle
9-4	Helon Taylor (Kat.)	Brian & Melissa Hurley	Foot injury - no flashlight or water
9-4	Roaring Brook	Heather Newson	Severe dehydration
9-15	Hunt Trail (Kat.AT)	Yvonne Vanderwall	Left ankle injury
9-19	Helon Taylor Trail (Kat.)	Mike Hayes Party	Hand injury, hypothermia exhaustion
9-22/23	Wassataquoik Stream	Lorraine McDonald	Foot injury
9-24	Russell Pond	Guy McChesney	Ankle injury
10-9	So. Branch Mt.	Andrea Antirenillia	Foot injury-poss. Fracture
10-10	So.Br.Pd. Campground	Joseph Delorenzo	Fractured arm
10-15	Russell Pond Trail	Gary Hawk	Overdue party
11-16	Swallow Tail Rd.-SFMA	Chris Finkelstein	Lost hunter
11-18/22	Freezeout Trail-T6R9	2 infants	Search for deceased children



BAXTER STATE PARK AUTHORITY

STATE OF MAINE

AUTHORITY MEMBERS

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ANDREW KETTERER
ATTORNEY GENERAL
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COMMISSIONER OF INLAND FISHERIES AND WILDLIFE

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March 26, 1999

TO: BAXTER STATE PARK AUTHORITY

FROM: *ICC* IRVIN C. CAVERLY, JR., DIRECTOR, BAXTER STATE PARK

SUBJECT: ACTIVITY REPORT #1 – FIVE U OF M STUDENTS DISORIENTED
ON KATAHDIN

On Sunday March 21 at about 7:00 a.m., I received a call from Chief Ranger Chris Drew that there was an incident on Katahdin that had the potential of developing into a serious situation. He had received a call from the Piscataquis County Sheriff's Department at about midnight reporting that they had received a 911 call from Andrew Williams, a U of M student. He was concerned about his companions who had climbed Mr. Katahdin for an intended day trip and, as of midnight, had not returned. The following information is an outline of the incident and the good news that all were evacuated safely and, except for fatigue, in good health. The downside is the cost of the operation and some risks involved in the search procedures to participants of the search.

The packet includes letters that I received this week from the five students and my letter to the students with the estimated costs incurred by BSP and Maine Warden Service. You will note from my letter to the students, I concluded it inappropriate to prosecute for I am convinced they did not intend to violate Park rules. However due to impacts they caused and their realization that they erred, I have revoked their privilege to use the Park until the start of the summer season year 2000.

I will give an overview of my full report at the next Authority meeting. If you have questions in the meanwhile, please feel free to call. Thanks.

ICC:rm

Encl.

cc: Frank Clukey John Loyd BSP Admin.



TO PRESERVE AND PROTECT

Rescue Incident Baxter State Park March 20, 1999

On March 20th at 12:43 am Piscataquis Sheriff Department received a 911 call from Andrew William indicating he was one of five University of Maine students who attempted a climb up the Abol Trail to Baxter Peak then down the Saddle Trail to Chimney Pond to Roaring Brook then 14 miles back to Abol Bridge via the Park Route Road.

The party did not pre-register for this technical climb with Baxter State Park, which is a requirement for all climbers. Since they did not register park personnel were unaware of their presence in Baxter State Park.

Andrew indicated that he was feeling ill about six miles into the trip and at a point identified as the foot of Abol Slide told the group that he was turning back. The remainder of the group: Colby Smith, Jediah Porter, John Burns, and Kris Guyot continued and reached Baxter Peak at 10am. Descending the Plateau of Mount Katahdin they became disoriented due to whiteout conditions and moved in a westerly direction down what is commonly known as Witherle Ravine.

They bivouac for the night with inadequate equipment. The following morning they followed Katahdin Stream in a SW direction until intersecting the Hunt Trail at Katahdin Fall approximately ½ mile from their bivouac camp.

The party was located by Warden Service Pilot Jason Bouchard and Park Ranger Bob Howes at about 7:40am. Ranger Loren Goode was in route to Katahdin Stream Campground and located the group at 7:49am. Meanwhile, Andrew Williams arrived safely at Abol Bridge and made the call to the Piscataquis Sheriff office.

Tremendous effort and response was provided by Baxter State Park, Warden Service, and volunteer search and rescue groups. This response also included ~~fixed~~ ^{winged} aircraft and putting the 112th on standby.

As this incident occurred in violation of Baxter State Park Rules and Regulation there is an on going investigation to determine necessary action.

March 22, 1999

Memo

To: Buzz
From Malcolm

RE: Costs Associated with rescue 3/21/99

Baxter State Park Employee costs	\$1858.36
Hotel Terrace Breakfast costs	32.75
Sandwiches to go	<u>140.00</u>
Total Costs for Baxter State Park	\$2040.11
Maine Warden Service Estimated Costs	<u>1277.86</u>
Total Cost	<u>\$3317.97</u>

REPORT CONCERNING LATE (BIVOUACED) CLIMBING PARTY

2/6-7/99

Submitted by Stewart C. Guay, Alpine Ranger, Chimney Pond

One of three technical pairs (all members of Bowen party of six) encountered unexpected difficulty and got off route into a presumably easier area to finish the climb. This pair, comprised of Greg Farrell and Brian Carlock, heretofore to be known as team B, left Chimney Pond at 5:10 A.M. to climb the Cilley-Barber Route.

I was noting their slow progress during the day and became alarmed when I spotted team B off route (heading toward Black Gully, a gully that divides the Armadillo and Flatiron Buttresses of Katahdin) and still low on the mountain at 2:20 P.M. At that time I hoped that when 3:00 P.M. turn around was not met, the team would rapidly rappel the route in the two hours until dark.

At 3:30 P.M. I noted team B still climbing and still two pitches below the base level of the Armadillo Flake. Continuous observation revealed that these individuals had no intention to rappel and at 4:45 I notified 51 of the situation

6:00 P.M. brought worsening weather conditions, and I observed team B's headlamps, having made little progress. 7:00 P.M. brought summit clouds and light snow, temps in the teens.

At 8:30 P.M. I notified 51 that the last of the remaining Bowen party members were 45 minutes out on Dudley Trail. These individuals had a small personal handitalki to communicate with team B.

At 9:15 P.M. Sean Bowen of team C had returned to camp and installed a new personal handitalki battery hoping to make communication with team B. At this time Sean Bowen (expedition leader) informed me that he had instructed team B to rappel the route (via radio) at 3:00 P.M. and that team B had refused, scared to safely descend steep snow.

At 9:30 P.M. communication was made with team B. They reported no injuries, plenty of food and water, and they were bedding down for the night with intentions of moving at first light. At 9:45 P.M. I notified 51 of developments and he indicated that team B, upon return to Chimney on 2/7, would be grounded.

2/7/99 5:10 A.M. 12° 5-15 mph wind gusting 20+ summit capped in clouds, skies otherwise clear, decent moonlight, prevailing NW wind on summit.

At 5:30 A.M. I spoke with team B (via radio). They reported being cold but O.K. We talked Beta (route info), and they indicated that they were stomping around with intentions to move up at first light. I also spoke with the 4 climbers in camp and instructed them to get their equipment ready with sleeping bags, adequate food, thermoses and technical equipment for going up to assist.

At 6:00 A.M. I spoke with 51 and he instructed me to issue the four my handitalki and for myself to stay in camp and monitor developments until team B has been safely brought up the remainder of their route to the top. We will call the response team unit 13.

At 6:50 A.M. I met with unit 13 and we discussed safety issues, "rescue" plans, proper S&R knots, proper radio usage, and the importance of staying together (amongst other things like weather concerns). They then departed. At 7:37 A.M. unit 13 notifies that team B now insists on committing to the 9+ pitch rappel from their current location in Black Gully West. I instruct unit 13 to drop into the South Basin to get a visual and talk team B down.

At 8:10 A.M. binocular check from Chimney Pond shows no activity yet visible on rappel. At 8:24 A.M. I ask 10-20 of unit 13, who is just off Cathedral in South Basin. They see snow sloughing out of Black Gully but see no climbers. At 9:10 A.M. unit 13 still has no visual and plans to move to the base of the Cilley-Barber route. At 9:15 A.M. unit 13 has radio contact with team B. They are doing ok and have completed two pitches of their rappel. At 10:00 A.M. I instruct unit 13 to move to the base of the Chimney for a visual on team B. At 10:07 A.M. unit 13 attains visual of team B, now almost to the base Flatiron Buttress. 10:52 A.M. first visual of team B from Chimney Pond. They seem to be moving very slow. At 11:27 A.M. unit 13 requests permission to send two strong climbers up part way to meet team B and fix anchors in hopes of speeding team B's progress. Bob Howes and I grant permission.

At 1:54 P.M. unit 13 calls in an equipment failure (broken crampon) and that they, due to fatigue, would be standing down from technical assist. At 3:04 one of team B has rappelled to top of the last pitch and ½ of ice before reaching "safe" ground. Chris Ferro of unit 13 returns (he being the individual that experienced the broken crampon) to Chimney and also informs me that he sustained a leader fall during his effort and that he would be staying in camp; uninjured. At 3:25 P.M. team B starting last pitch of rappel. At 3:37 P.M. all party members off technical rappel. At 4:45 P.M. all members back at Chimney Pond. I instruct them to rest and expect a debriefing at 2/8/99. Sean Bowen was also reminded that the members of team B would not be allowed above treeline for the duration of this "expedition."

2/8/99 Debriefing and comments

I spoke with Sean Bowen on his comments and also how well he knew team B. Sean said that he met team B one year ago and that team B had been climbing together for one year. Sean was frustrated with their decisions and the general breakdown in leadership. Says that he had adequately informed all members with copious trip and route information. He thinks that team B should have bowed out from attending Katahdin trip, especially in light of an accident on NH's Mt. Washington on month ago.

Team B's accident was a result of a training/practice in simultaneous climbing. (Simultaneous climbing is used in long alpine type ascents, is less "safe" in terms of protection, is "more safe" in terms of time on route and finishing before dark.) Team B was simultaneous climbing grade 3 (moderate steepness) ice as practice and both fell. One went 40 feet, another (Brian) fell 100+ feet. He had to be litter carried out to the roadside. Medical reports indicate just bad bruising. At the time he had intense pain in back and sides from the tumbling fall.

Brian may have "only" had severe bruising, but the team as a whole was greatly affected. They trained little following the accident and had considerable cautiousness, which caused them to be slow and too "careful" on route.

BAXTER STATE PARK

SEARCH/RESCUE
THEFT/VANDALISM

INJURY

ANIMAL

VEHICLE

(circle one)

LOCATION: T3 R10 Baxter State Park, Piscataquis DATE: 8/25/99
Reported: 8/26/99 9:30 a.m. Responded: 8/26/99 11:15 am

NAME Virginia (Ginger) Lang
(first) (last) (middle)

ADDRESS: 124 Authors Rd.

CITY: Concord, MA 01742

TEL: _____ DOB _____

PROBLEM: Lost Hiker

COMMENTS: Ginger Lang and Gary Emner left Katahdin Stream to hike up Owl Mt. to Barren Mt. at 6:34 a.m. They are part of a group who hike all of the 3000 in New England. They left the top of the Owl at 9:25 a.m. reaching the saddle 3010' of Barren Mt. at 11:40 a.m. At that time Gary had decided that the going was too tough and rugged and was going to return to Katahdin Stream. He tried to convince Ginger to return however she was highly motivated to accomplish her objective. Gary gave Ginger extra water, food and flashlight. They were well prepared for the trip with no intentions of purposely staying overnight. Ginger's planned alternate return was to head southerly to connect with Owl Brook eventually hook up with Owl Trail.

Ginger reported she summited on top of Barren Mt. at 6:10 p.m. She signed the register and proceeded down hill. After a few near mishaps she bivied near 2800' around 8:45 p.m. to 9:00 p.m. On 8/26/99 she started at 5:20a.m. She bushwacked her way to the toteroad coming out between Tracey Pd. and

2 Barren Brook at approximately 2 p.m. CRI Bruce White found her walking south along the toteroad.

The only person I have seen more bruised, scratched and cut up was Mr. Rubin, who was found in the Klondike. This person is extremely lucky the events turned out in such a positive manner.

Staff Person Reporting Incident: Robert E. Howes, BSP Ranger II

STAFF, WITNESSES / VOLUNTEERS / OTHER AGENCIES

Name: Bruce White, CRI- Katahdin Stream Tel: _____

Address _____

City _____ State _____

VI NEW CONSTRUCTION

Major new projects centered on construction of crew camps at Abol Field, the SFMA and Disability-Friendly modifications in campground and day use toilet facilities.

1. Interior paneling was installed on both levels of the Abol Field crew camp (10,000 board feet).
2. Completion of the winter ski trail from Round Pond to Rum Pond to the Roaring Brook Road.
3. A replacement cedar log lean-to was built at Little East Campsite on the East Branch of the Penobscot River.
4. New replacement toilets were built at Pogy Pond and Wassataquoik Lake.
5. Disability-Friendly toilets were constructed along Park roads and campgrounds at Abol Field, Katahdin Stream, Roaring Brook, Daicey Pond and Kidney Pond Campgrounds.
6. A new septic system was installed at Abol Field crew camp (T2R9) and the SFMA crew facility (T6R10).
7. New grounds were loamed, seeded and mulched at the Abol Field crew camp.
8. A search and rescue transport sled was built in Millinocket for winter search and rescue activities.
9. A 8' x 8' radio repeater transmission building was constructed on Burnt Mt. During the fall.
10. A replacement cedar lean-to was constructed at Chimney Pond.
11. A solar powered system to pump water was installed at the new SFMA crew camp facility.
12. Numerous new signs were installed at trailheads. Two large entrance signs were built and posted near the Togue Pond and Matagamon entrances.
13. Built 25 replacement cedar picnic tables.

VII SPECIAL ACTIVITIES

1. Loon survey of various Park waters.
2. Inspected private canoes on outlying ponds for registration.
3. Upgraded several campsites, toilets, etc., to be handicap friendly.
4. Transported recyclables to Recycle Center.
5. Assisted and monitored special events days such as: Don Fendler, K-100, AT Days events – set up and cleaned up after events.
6. Checked hawk complaint on Lower Owl Mt. Trail.
7. Dispatch and removal of sick moose.
8. Debugged Pine Cover Camp of hornets.
9. Cleared Rum Mt. Road, built snow bridge, proposed potential site for Native

American activities.

10. Transported volunteer trail crew – Abol Bridge to Togue area.
11. Transported Huey and Abbott Meader and wives – Abol Bridge to Daicey Pond.
12. Transported Wilderness S&R and Mahoosuc S&R (training) – Abol Bridge to Roaring Brook and Chimney Pond.
13. Transported Al Cooper/family – Windy Pitch to Abol Bridge.
14. Investigated illegal snowmobile at Kidney Pond – stolen wood.
15. Transported Ellis party – Abol Bridge to Roaring Brook.
16. Transported (3) propane cylinders – Abol Bridge to Tony York camp.
17. Tou to Chimney Pond guiding Sgt. Greg Sanborn and Warden Ron.
18. Assisted IF&W stocking trout in Rocky, Round and Abol Ponds.
19. Assisted with Wendy Barr school group planting wild rosebushes.
20. Hauled six yards mulch to Abol Scout Area.
21. Dealt with bat problems at Togue Gate.
22. Coordinated work project with Maine Bound.
23. Assisted Millinocket P.D., Maine, Mass. State Police/Attleboro, MA incident.
24. Ranger staff spent considerable time educating, policing parking day use vehicles

VIII LAW ENFORCEMENT

Baxter State Park maintains a low profile law enforcement program with emphasis on education and information. Most violations are centered on illegal camping, fires and fish and wildlife violations. Increased hunting activity in T6R9 and T6R10 requires increased patrols in these areas during the hunting season as many hunters travel through or near the game preserve portion of Baxter State Park.

Prosecutions	- 16
Evictions	- 11
Written warnings	- 15
Criminal investigations	
(2 thefts, 1 vandalism)-	3
Motor vehicle acci-	
dent investigations	- 7

17

Date: _____

P* - Physical
S - Summons
B - Bond

[illegible]

BAXTER STATE PARK COURTESY TICKET WARNINGS							
DATE	Ticket #	LOCATION	VEHICLE REG #	STATE	NAME	RANGER	VIOLATION
#####	305	Daicey Pond	CCX552	VT	Bellucci	M. Williamson	Parked in upper pkg. Lot in camper overflow spot
#####	306	Daicey Pond	552762	ME	Bossie	M. Williamson	Parked in upper pkg. Lot in camper overflow spot
#####	307	Daicey Pond	6566ER	ME	Hartley	G. Williamson	Parking in area designated for DP camper
#####	309	Daicey Pond	7105EL Mazda	ME	Walden	G. Williamson	Parking in unauthorized area
#####	355	Katahdin Stream	AWP-8175	PA	Farrell	B. White	Illegally parked in site - did not observe checkout time
#####	356	Katahdin Stream	EA-625	RI	Morecy	J. Lillis	Illegally parked
#####	357	Katahdin Stream	868-186	NH	McDonald	J. Lillis	Illegally parked
#####	358	VOID					
#####	359	Katahdin Stream	651DY	ME	Marchellets	B. White	Parked in entrance of K.S. not a designated area
#####	360	Katahdin Stream	177IGA	MA	Marr	B. White	Illegal Parking supposed to be at Daicey Pond
#####	361	Katahdin Stream	98370	ME	Craig	B. White	Parked in unauthorized area- permit for Daicey Pond
#####	362	Katahdin Stream	5925GV	ME	Swan	B. White	Permit for Doubletop
#####	308	Daicey Pond	6373H2	MA	Sortin	M. Williamson	Parking in a Daicey Pond camper parking spot
#####	363	Katahdin Stream	4131ER	MA	Ryan	B. White	Parked in unauthorized area - permit to climb North Brother
#####	364	Katahdin Stream	1033LR	MA	Goodman	B. White	Unauthorized parking violation - Daicey Pond
#####	365	Katahdin Stream	3442D	ME	Barker	B. White	Unauthorized parking - Doubletop
#####	366	Katahdin Stream	5284DR	ME	Sanborn	B. White	Unauthorized parking - destination Foster Field
#####	367	Katahdin Stream	7813GX	ME	Palmer	B. White	Unauthorized parking - destination Matagamon
#####	402	Roaring Brook	BZ851	CA	McMahon	K. Donnell	Parking in day-use reserved spot
#####	368	Katahdin Stream	6304DV	ME	Socher	B. White	Unauthorized parking area for hikers
#####	370	Katahdin Stream	1976BR	MA	Pelusky	B. White	Parking in unauthorized area near site #23
#####	369	Katahdin Stream	903XEA	MA	Pelusky	B. White	Parking in unauthorized area near site #23
#####	371	Katahdin Stream	BB516V	NY	Weiss	B. White	Parking in unauthorized area partially blocking entrance
#####		Matagamon Second Lake	Title 12	ME	Desvergnés	Loren Goode	Inadequate PFD

IX MAINTENANCE

TRAIL REPORT - 1999

Trail Supervisor - Lester C. Kenway

Trail Crew Leader - Alan Watson

Trail Crew Leader - Alana Reid

SCA Conservation Associates:

Matthew Amadon, New Ipswich NH

Heather M. Horner, Mebane NC

Chris Fabian, Holderness NH

SCA Resource Assistants:

Kayje Booker, Helena MT

Marcie Eipper-Mains, Baltimore MD

Ben Hansen, Holland MI

Dana Heimerl, Crystal Falls MI

Casey Martinson, Westfield NY

Melissa Nelson, Flagstaff AZ

Ben Pellegrom, Newton MA

Joshua Rapp, Dansville NY

Moises Saca, Palmdale CA

Jason Schilling, Stow OH

Marcus Selig, Bishopville MD

Jake Whitehead, Hants, England

Paul Wood, Putney VT

Trail Supervisor work by categories:

Hiking Miles = 278

Field Work:	1328 Hrs.	70%
Office:	423 Hrs.	22%
Support Services:	139 Hrs.	8%
Total	1890 Hrs.	100%

Vehicle Use:	Service Truck: 3000+ Mi.	Suburban: 2233 Mi.
	Chevy Van: 5125 Mi.	GMC Truck 2303 Mi.

TOTAL HOURS SPENT ON TRAIL WORK - 120 VOLUNTEERS IN 1999

Trail Supervisor	1328
Trail Crew Leader (AW)	320
Trail Crew Leader (AR)	408
SCA Resource Assistants	4169
SCA Conservation Associates	1172
AMC Bangor Area	70
AMC Service Trips	630
Bowdoin College Outing Club	180
College Conservation Corps	670
Maine Outdoor Adventure Club	160
Maine Appalachian Trail Club	91

PATH	350
SCA Alumni	200
<u>Individuals</u>	<u>1450</u>
Total	11,198 Hrs.

DIVISION OF TRAIL LABOR ACCORDING TO CATEGORIES:

<u>Type of work</u>	<u>%</u>
Alpine Restoration	5%
Bog Bridges	13%
Bridge Construction	5%
Clearing Blowdowns	12%
Clearing Brush	24%
Clearing Waterbars	2%
Erosion Control	24%
New Trail Construction	9%
Painting Blazes	2%
Trail Signs	<u>4%</u>
	100%

COMPARISON OF 1998 TO 1999 REGULAR MAINTENANCE EFFORT:

<u>Task</u>	<u>1998</u>	<u>1999</u>	<u>Change</u>
Trail Inspected	43.5 Mi.	81.1	+86%
Blowdowns cleared	98.2 Mi.	153.1	+55%
Brush cleared	22.9 Mi.	55.3	+141%
Blazes painted	3.7 Mi.	42.1	+1037%
Waterbars cleared	246	276	+12%

NEW TRAIL PROJECTS

1. Rum Pond Trail:

This trail was completed by mid-June. Preliminary tree cutting done during the winter was followed by cutting all stumps close to the ground, and mowing all brush in order to make the trail suitable for summer hiking.

2. Hunt Trail:

400 feet of the trail was relocated to avoid a section of steep trail that had been relocated in 1993.

BRIDGE PROJECTS

1. Abol Stream Trail: A 22-ft ski trail bridge made of pallets was replaced with a deck bridge. This bridge should allow for more reliable and safe passage by park visitors.
2. Russell Pond Trail: A 15 ft. bridge was replaced over a small stream located 3/4 mile

north of Roaring Brook.

3. Trout Brook Farm: A new abutment was constructed under the north end of the bridge over Trout Brook. Temporary blocking was used to support the bridge while the new pier was being built. Extensive decay in the 17-year-old hemlock crib made for difficult and hazardous work. The new pier is constructed of 6"x6" cedar timbers and is filled with over 30,000 lbs. of stone. The upstream side of the pier is faced with hemlock timbers on a 45-degree slope to serve as an ice deflector.

BOG BRIDGE PROJECTS

1. Chimney Pond Trail: 90 feet of bog bridge was installed over low areas along the shore of Basin Pond.
2. Freezeout Trail: 88 feet of bridging was added to a section of bog bridge built in 1997. These bridges are located a few hundred feet east of the Webster Lake Outlet Campsite.
3. Mount OJI Trail: 190 feet of bog bridging was installed near the Foster Field trailhead. Some of the new bridges replaced old ones built by Kidney Pond volunteers more than 25 years ago.
4. Wassataquoik Lake Trail: 1225 feet of bridging was built in the Center Pond area. This completes this long-term project, started in 1997, to bridge the soft areas found on this segment of trail.
5. Wassataquoik Stream Trail: 300 feet of bog bridges were fabricated on site and installed near the Wassataquoik Lean-tos. These bridges replaced ones built in 1980, many of which were badly decayed.
6. Rum Pond Trail: 70 feet of bog bridge was installed at the outlet of Rum Pond.
7. Russell Pond Trail: 460 feet of deteriorated bog bridges were replaced near Whidden Pond.

A total of 2523 feet of bog bridge was built during the 1999 season

TREADWAY PROJECTS

1. Cathedral Trail: Rock was collected to be used to stabilize a 200 foot section of the upper Cathedral Trail. The rocks will be built into steps and rip-rap during the 2000 season.
2. Chimney Pond Trail: 42 rock steps were constructed above Pamola Brook. This was

part of a long-term project to replace decayed log steps (c. 1974) with more durable rock steps.

3. Hunt Trail: Rock was collected to be used to restore the eroded section of trail above Katahdin Falls. The rocks will be used to build steps and waterbars during the 2000 season.
4. South Turner Mt. Trail: 18 rock steps were built to stabilize a short, steep portion of this trail.
5. Helon Taylor Trail: 6 rock steps were built near the junction with the Chimney Pond Trail.
6. Wassataquoik Lake Trail: 600 feet of tread was improved along the trail one mile northwest of Center Pond. The trail had many small stumps (left from clearing the trail) and rough areas which were smoothed out to make for better walking.

Notes:

1. The total number of hours dedicated to trail work increased by nearly 50% in 1999. One reason for the increase is that SCA trail crew travel time has been included this year. Another factor is that we had two crew leaders this year. We also have seen a big increase in volunteer time due to the new "Baxter Trail Team" approach. In this new program, individuals are invited to come to the Park for a week-long project, and work with 3-5 other volunteers in a trail crew team. This program has been very successful, and has helped us out on several projects. The Fall College Conservation Corps team made a significant contribution to our total also.
2. SCA continues to be the core of our trails program. We are fortunate to be able to participate in this program. SCA has consistently provided motivated volunteers since 1982.
3. Crew Leaders Alan Watson and Alana Reid deserve thanks for accomplishing many tasks in many locations, always maintaining a high standard of quality. Their previous trail experience contributed to their effectiveness and good relations with their crews.
4. We were quite fortunate to have three Conservation Associates who served as Assistant Team Leaders during the season. Their trail work and people skills enabled us to take on a greater number of projects, and proved to be invaluable at times when a Crew Leader was not available or ill. Matt Amadon, Heather Horner, and Chris Fabian are to be commended for their service to Baxter State Park.
5. The College Conservation Corps team lead by Scott Pfeiffer provided us with a good boost this fall. They did extensive clearing work on trails in the western region of the park, and contributed to our excellent accomplishment in general maintenance this

season.

6. Consistent with my hopes expressed in last year's report that we would be able to dedicate a solid amount of time to general maintenance in 1999, it has turned out that we have succeeded in doing just that. We have been able to make good progress in general maintenance in nearly all areas of the park. In particular, we have more than doubled the mileage of cleared trail, and have painted blazes on 10 times as many trails as we did in 1998. When it comes to the "battle against the brush," Park trails are in better shape than I have ever seen them in the past 20 years.

Respectfully Submitted,

Lester C. Kenway
Trail Supervisor

1999 BAXTER STATE PARK TRAIL MAINTENANCE SUMMARY

TRAIL NAME	MILEAGE	REGION	INSPECTED (MILES)	BLOWDOWNS CLEARED (MI)	BRUSH CLEARED (MI)	BLAZES PAINTED (MI)	WATERBARS CLEARED (NO)
ABOL	2.8	SW		1.0			66
ABOL POND	1.7	SW					
ABOL STREAM TRAIL	1.3	SW	1.3	1.3	1.3		
APPALACHIAN	5.1	SW		5.1			
APPALACHIAN (W BRANCH)	4.1	SW	0.6	4.1	0.6		
BARRELL RIDGE	0.3	N					
WADLEIGH NOTCH	1.0	N					
BURNT MT.	1.3	N	1.3	1.3			
CATHEDRAL	1.5	SE		0.3	0.3	0.2	
CATHEDRAL CUT-OFF	0.2	SE					
CELIA & JACKSON PONDS	1.3	SW	1.3	1.3	1.3	1.3	
CENTER RIDGE	2.1	N					
CHIMNEY POND	3.3	SE	3.3		1.0	3.3	89
COLT'S POINT	0.3					0.3	
CRANBERRY POND NATURE TR	1.4	SW	1.4	1.4	1.4	1.4	
DAICEY POND NATURE	0.7	SW	0.4				
DOUBLETOP MT.	7.9	SW	6.9	7.9	3.0	7.0	
DRAPER POND	0.2	SW	0.2	0.2		0.2	
DUDLEY	1.3	SE	1.3	0.2	0.2		
DWELLY POND TRAIL	3.0	NW		3.0			
FIVE PONDS	6.3	N	4.5	6.3	2.0	1.0	
FOSS & KNOWLTON SKI TRAIL	3.5	SW	3.5		3.0	2.4	
FOWLER BROOK	1.3	N		1.3			
FREEZEOUT	15.4	N	3.0	15.4			
GRAND FALLS	2.7	C			1.0		
GRASSY POND	1.3	SW	0.6	1.3	1.0		
HAMLIN PEAK CUT-OFF	0.2	SE					
HAMLIN RIDGE	1.5	SE		0.3	0.3		
HELON TAYLOR	3.2	SE	0.5	1.5	1.5		31
HORSE MT.	1.4	N		1.4	1.4		
HOWE BROOK	2.0	N					
HUNT	5.2	SW	4.0	3.0	3.0		
KETTLE PONDS TRAIL	1.8	SW	1.8	1.8	1.8	1.8	
KIDNEY POND OUTLET	1.8	SW	1.8	1.8	1.8	1.8	
KNIFE EDGE	1.1	SE				0.2	

1999 BAXTER STATE PARK TRAIL MAINTENANCE SUMMARY

TRAIL NAME	MILEAGE	REGION	INSPECTED (MILES)	BLOWDOWNS CLEARED (MI)	BRUSH CLEARED (MI)	BLAZES PAINTED (MI)	WATERBARS CLEARED (NO)
LEDGE FALLS	1.4	C			0.8		
LILY PAD POND	0.4	SW	0.4	0.4	0.2	0.4	
LITTLE ABOL FALLS	0.8	SW		0.8			6
LITTLE BEAVER POND	0.7	SW	0.7	0.7	0.7	0.7	
LITTLE ROCKY POND PORTAGE	0.1	SW					
LITTLE ROCKY POND	0.4	SW		0.4			
LOOKOUT	1.3	C		1.3	1.0		
LOST POND	1.0	SW		1.0			
LOWER FOWLER POND	0.9	N		0.9			
MARSTON	4.4	SW	3.4	3.0	2.0	2.2	26
MIDDLE FOWLER POND	5.5	N		1.8			
MT. COE	3.7	SW	1.0	3.7	2.5		
NORTH BASIN	1.2	SE		1.2	1.2		
NORTH BASIN CUT-OFF	0.7	SE		0.7	0.7		
NORTH PEAKS	5.7	C		4.7			
NORTH TRAVELER	2.7	N		2.7	2.7		
NORTHWEST BASIN	8.5	C		6.0	0.4		4
OJI LINK	0.5	SW					
OJI NORTH SLIDE	2.7	SW		1.0			
OJI SOUTH SLIDE	2.5	SW	0.2	1.0			
POGY NOTCH	9.6	C	3.0	6.0	1.5	1.5	
POLLY POND	0.9	SW	0.9	0.9	0.9		
ROUND POND TRAIL	0.1	SW	0.1			0.1	
ROARING BROOK NATURE TR.	0.6	SE	0.6				
ROCKY POND	0.6	SW		0.6			
RUM POND TRAIL	1.8	SW	1.8	1.8	1.8	1.8	
RUSSELL POND	7.1	SE	3.0	7.2	1.0	3.0	
SADDLE	2.2	SE	2.2	2.2	1.0	1.6	29
SANDY STREAM POND	1.4	SE	1.4	1.4		1.4	
SENTINEL LINK	0.5	SW	0.5	0.5	0.5	0.5	
SENTINEL LOOP	0.6	SW	0.6		0.5	0.6	
SENTINEL MT.	3.2	SW	3.2	3.2	1.5	3.2	
SLAUGHTER POND	0.9	SW	0.9	0.9			
SOUTH BRANCH FALLS	0.5	N	0.5	0.5	0.5	0.5	
SOUTH BRANCH LEDGES	0.8					0.8	
SOUTH BRANCH MT.	4.5	N	0.6	4.5		0.6	

1999 BAXTER STATE PARK TRAIL MAINTENANCE SUMMARY

TRAIL NAME	MILEAGE	REGION	INSPECTED (MILES)	BLOWDOWNS CLEARED (MI)	BRUSH CLEARED (MI)	BLAZES PAINTED (MI)	WATERBARS CLEARED (NO)
SOUTH BROTHER	0.2	SW					
SOUTH TURNER MT.	1.3	SE	0.7	1.0			13
THE OWL	2.2	SW	1.5	2.2	2.2		
TROUT BROOK MT.	2.3	N	2.3		2.3	2.3	
WADLEIGH BROOK	10.5	N	3.0	10.5			
WASSATAQUOIK LAKE	14.3	C	6.0	13.2	1.5		12
WASSATAQUOIK STREAM	3.9	C	3.9	3.0	2.0		
WINDEY PITCH POND	1.0	SW	1.0	1.0			
TOTALS	205.6		81.1	153.1	55.3	42.1	276

B S P TRAIL CREW VOLUNTEERS - 1999 SEASON - PREPARED BY L. C. KENWAY 12/13/99
ALL NAMES WITH ADDRESS HAVE 20 VOLUNTEER HOURS OR MORE.

KIDNEY POND TRAIL TEAM 6/20-24

Jennifer Melen	120 Charles Ave.	Uxbridge	MA	01569
David Decker	72 Winship St.	Bath	ME	04530
Janice Clain	PO Box 89	Levant	ME	04456
Norman Putnam	PO Box 130	Bryant Pond	ME	04219

HUNT TRAIL TEAM 7/9-13

Elsa Sanborn	15 Westwood Road	Bangor	ME	04401
Cat Eich	6055 Lower Moncure Rd	Sanford	NC	27330
Dan Pierce	16 Brigham Road	Paxton	MA	01612
Staci Smith	15 Craggmere Ave	South Portland	ME	04106
Ed Langlais	RR2 Box 1210	Dexter	ME	04930
Sherri Langlais	RR2 Box 1210	Dexter	ME	04930
Steve St. Croix	HCR 65 Box 5170	Lincoln	ME	04457

MAINE OUTDOOR ADVENTURE CLUB 7/17-19

Bill Shouse	37 Saunders St.	Portland	ME	04103
Michelle Roy	78 Fowler Rd	Cape Elizabeth	ME	04107
Marcia Ginsberg	63R Charter St.	Boston	MA	02113
Mike Morrison	111 Sherman St. #23	Portland	ME	04101
Carey Kish	153 Hartley St.	Portland	ME	04103
Bill Connolly	24 Old County Road	Scarboro	ME	04074
Vicki Durrell	115 Clark St.	Portland	ME	04102
Shaun Harrigan	263 York St. #1	Portland	ME	04102
Andi Bartlett	59 Sylvan Road	South Portland	ME	04106
Ken Matthews	3 Mountain Road	Falmouth	ME	04106

CHIMNEY POND TRAIL TEAM 7/18-22 & 8/1-5

Jean Amaral	15 Cliffe Avenue	Lexington	MA	02420
Helen Gingras	41 Old Ayer Road	Groton	MA	01450
Joseph Miller	57 Mary Ave.	Dracut	MA	01826
David J. Hardy	PO Box 206	Moscow	VT	05662
Stephen L Crowe	4 Sargent St.	Cherry Valley	MA	01611
Carol A. Gregory	C/O David Hardy PO Box 206	Moscow	VT	05662
Cat Eich				

NESOWADNEHUNK TRAIL TEAM 7/25-29

Thomas Shoesmith	112 Charlton St. #2S	New York	NY	10014
Doug Dolan	63 Kaler St.	South Portland	ME	04106
Jennie Warner	15 Walkers Lane	Kennebunkport	ME	04046

BANGOR AMC GROUP 8/9

Gerry Locke
Beth Cuddy
Norman Spector
Leslie Choquette
Kathryn Gribble
Harry Cunningham
Shirly Ellis

SCA ALUMNI 8/8-12 & 10/3-7

Jason Reece	920 Minor Ave.	Hamilton	OH	45015
Bob Hawkins	291 E St. Road 250	Brownstown	IN	47220
Nancy Hawkins	291 E St. Road 250	Brownstown	IN	47220
Mac Cashin	118 Birchwood Ave	Upper Nyack	NY	10960
Kelly Parton	707 National Street	Santa Cruz	CA	95060

CHIMNEY POND TRAIL TEAM 9/9-13

Sue Burnell	6 Windy Point Lane	Saco	ME	04072
Jim Burnell	6 Windy Point Lane	Saco	ME	04072
Monty Kalloch	9 Colley Hill	Gray	ME	04039

PATH 9/9-13

Sue Bodyke	109 Pleasant St.	Milford	ME	04461
John Minot	109 Pleasant St.	Milford	ME	04461
Gerilyn Bosse	123 Middle St. #2	Old Town	ME	04468
Margaret Coleman	272 Wiswell Rd.	Brewer	ME	04412
Dave Gilbert	RFD 8 Box 5034	Bangor	ME	04401
Cheryl Hathaway	103 Thomas Hill Rd.	Bangor	ME	04401
Jim Kadin	RR1 Box 267A	Ellsworth	ME	04605
Mary Knowlton	40 Kelly Road	Orono	ME	04473
Marjorie Stratton	40 Altons Ave.	Ellsworth	ME	04605
Chris Corio				

AMC SERVICE TRIPS 8/22-26 & 8/29-9/2

Joan Leonard	PO Box 101	Tilton	NH	03276
Steven Minarovich	PO Box 1089	Onset	MA	02558
Jessica Munzel	139 E 35th St #5K	New York	NY	10016
Tammy Straus	19 Garden St. #21	Cambridge	MA	02138
Debra Rosenzweig	259 W 10th St. #4A	New York	NY	10014
Dan Kirby	42 Cliff Road	Milton	MA	02186
Jim Tracy	266 Highland Ave	South Portlan	ME	04106
Ty Cook	40 Oxford Park	Revere MA 02151	MA	02151
Michelle Massa	140 N Main St.	Cohasset	MA	02025
Ken Moller	68A Memorial Hwy	N Yarmouth	ME	04097
Bob Miller	37 Tilton Ave	Kittery	ME	03904
Justin Fisher	1 Woodside Rd	Winchester	MA	01890
Jack McLeod	11 Unity Street #4	Boston	MA	02113

BOWDOIN COLLEGE OUTING CLUB 10/22-25

Katie Maloney	Smith Union Bowdoin College	Brunswick	ME	04011
Andrew Ross	Smith Union Bowdoin College	Brunswick	ME	04011
Marcie Brandenburg	Smith Union Bowdoin College	Brunswick	ME	04011
Julie Dietz	Smith Union Bowdoin College	Brunswick	ME	04011
Carissa Capuano	Smith Union Bowdoin College	Brunswick	ME	04011
Aaron Donohoe	Smith Union Bowdoin College	Brunswick	ME	04011
Joe Lane	Smith Union Bowdoin College	Brunswick	ME	04011
T J Fudge	Smith Union Bowdoin College	Brunswick	ME	04011
Rebecca Clark	Smith Union Bowdoin College	Brunswick	ME	04011

INDIVIDUALS

Paul Richard	111 Wellman St.	Lewiston	ME	04240
Francine Richard	111 Wellman St.	Lewiston	ME	04240
John Neff	RFD 1 Box 11390	Winthrop	ME	04364
Richard Aspinall	121 Peter Vier Road	Durham	ME	04222
Ricky Daniel	7 Curtis Road	Freeport	ME	04032
Scott Logan	37 Primrose Lane	Brunswick	ME	04011
Cory Logan	37 Primrose Lane	Brunswick	ME	04011
Harry Cunningham	8 Averill St.	Orono	ME	04473
Phil Pepin	RR #1 Box 98	Bradford	ME	04410
Robin Pepin	RR #1 Box 98	Bradford	ME	04410
Bob Bateman				
Diane L. Ober				
Robert J. Smith				
Barbara J. Smith				
Chris J. Brown				
Priscilla Seimer				
Linda Porter				
Ned Kitchell				
Charlene Post				
Alan Leathers				
Genny Leathers				
Ed Andrews				
Mike Lamoreau				
Don Nager				
Paul Smeltzer				
Nancy Andrews				
Robert Deslauriers				
Earl Brechlin				
Carl Brechlin				
Paul Paradis				
Doug Saunders				
Rob Jordan				
Ray Knapp				
Scott Knapp				
Rich Goenne				
Doug Dubois				
Bob Canavan				
Bryan Courtois				
Val Taylor				
Joleen Rice				
Mike D'Orio				
Mike Eugley				
Michelle Eugley				
Roger Martel				
Dane Courtois				
Sean Adjutant				
Zach Beckwith				
Jonathan Martel				
Sean Arseanault				
Kurt Parker				
Nate Roberts				

<p style="text-align: center;">1999 ANNUAL REPORT OF PARK CARPENTER ALBERT RICKARDS ADAM STANLEY, ASSISTANT CARPENTER</p>
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MAINTENANCE AND CONSTRUCTION PROJECTS

1. Worked in reservation office answering telephone and mailing out information packets during first week of January.
2. Installed new counter top work center in Park Naturalist's office.
3. Built new signs for Baxter State Park trails.
4. Shoveled, plowed and blew snow at Headquarters, warehouse and shop during winter months.
5. Cleaned bathroom, washed toilet and sink as needed in maintenance shop.
6. Built four handicap-friendly privies.
7. Cleaned carpentry shop on a daily basis.
8. Completed weekly, monthly and annual reports as required.
9. Installed work center in business Manager's office.
10. Installed computer keyboard slide out tray on Business Manager's work center.
11. Installed desk draw and slide out tray on Naturalist's work center.
12. Repaired hole in wall and painted wall at Park Headquarters.
13. Rebuilt chair for Chief Ranger's office.
14. Repaired handicap-parking sign at Park Headquarters.
15. Worked on several small projects in carpentry shop.
16. Painted ceiling in Naturalist's office.
17. Cleaned out tool room and organized tools in carpentry shop.
18. Shoveled snow off roof of carpentry shop.
19. Hauled logs from sawmill in Medway and piled logs beside carpentry shop.
20. Washed and cleaned truck regularly.
21. Built twenty-five picnic tables at Trout Brook Farm.
22. Helped Supply Clerk move boxes of supplies delivered at warehouse.
23. Assisted Chief Ranger in cutting and clearing a trail from Matagamon inlet Webster Stream to SFMA roads.
24. Built a canoe and paddle storage cabinet for SFMA.
25. Cut and installed extension jambs and window trim around window in Director's apartment.
26. Repaired walls in Director's bedroom at his apartment.
27. Built storage case for drill and router bits.
28. Built two Conservation Corp tote road signs (4'x8') for both entrances to Baxter State Park.
29. Painted sign and letters on both signs for Baxter State Park entrances.
30. Built recycle storage bin for Baxter State Park.
31. Regularly picked up supplies and lumber at hardware as needed for maintenance projects.
32. Installed tongue and groove pine on walls and ceiling of crew camp at Abol Field. (Large job of 10,000 board feet.)

33. Installed soundboard on walls and ceilings of crew camp at Abol Field.
34. Installed nail blocks between studs at Abol crew camp.
35. Traveled to mill in Medway to pick up cedar decking and hauled to the Park.
36. Took off air conditioner covers at Headquarters and Warehouse.
37. Ranger Barry MacArthur and I dug hole and installed new sign at Togue Pond entrance.
38. Built eight picnic tables in carpentry shop.
39. Built wheelchair ramp at Daicey Pond for cabin #6.
40. Made doorframe larger for cabin #6 at Daicey Pond.
41. Cut out logs and built new 36" door for cabin #6 at Daicey Pond.
42. Built wheelchair ramps at Kidney Pond for cabin #5 and dining hall.
43. Built new 36" wide door for cabin #5 at Kidney Pond to comply with ADA requirements for handicap accessibility.
44. Built new screen door at Kidney Pond for cabin #5.
45. Installed handrails on both wheelchair ramps at Kidney Pond.
46. Built and installed new screen door for cabin #6 at Daicey Pond.
47. Loaded new utility body with tools on Park Carpenter's truck.
48. Notched and laminated two counters to fit doors at Abol crew camp.
49. Installed two counter tops in bathrooms of newly built crew camp at Abol Field.
50. Waxed park Carpenter's truck as needed.
51. Installed back up lights on Baxter Park carpentry truck.
52. Installed handrail on privy at Togue Pond beach.
53. Built small ramp at Kidney Pond dining hall to get over threshold.
54. Built set of steps for one cabin at Daicey Pond.
55. Constructed a new disability friendly privy at Hudson Pond lean-to in SFMA.
56. Built new wheelchair ramp for Daicey Pond library.
57. Cut out logs at Daicey Pond library and framed for larger door opening.
58. Installed tongue and groove pine on shower stall walls so water heater could be installed at Abol Field crew camp.
59. Installed new door on library at Daicey Pond.
60. Installed new trim boards around door at Daicey Pond library.
61. Installed new trim boards on roof of library at Daicey Pond.
62. Traveled to, Bernard Crabtree's house to deliver his tool display previously viewed at Park Headquarters.
63. Worked on construction of several disability-friendly privies.
64. Installed new screen door on Daicey Pond library.
65. Built set of steps for Daicey Pond office.
66. Piled truckload of lumber in pole barn and stuck lumber.
67. Built new handrails for several outhouses.
68. Built new disability-friendly privy at Kidney Pond.
69. Installed new handrail on stairs at Daicey Pond.
70. Remodeled double unit privy at Abol to a disability-friendly single unit.
71. Built new disability-friendly privies at Roaring Brook, Katahdin Stream and Abol Field.
72. Repaired screen door on Administrative Camp at Togue Pond.
73. Installed new fireplace at Administrative Camp.

74. Moved several file cabinets out of Business Manager and Clerk Typist's offices.
75. Cut hole in wall of Chief Ranger's office; framed for new air conditioner.
76. Installed air conditioner unit in Chief Ranger's office in wall and trimmed around air conditioner unit.
77. Picked up dump truck load of pea stone and hauled to Daicey Pond.
78. Picked up truckload of hemlock at mill in Medway and stored in pole barn in Millinocket.
79. Worked on finishing interior at Abol crew camp.
80. Installed new screen door at visitor center bunkroom.
81. Moved 2000 books from conference room downstairs to storage room upstairs at Baxter State Park Headquarters.
82. Cleaned out storage room at Baxter State Park Headquarters.
83. Repaired broken letters on large Baxter State Park Headquarters sign.
84. Stained picnic tables in carpentry shop.
85. Worked on construction of crew camp at Abol Field.
86. Installed two solar tubes at Abol Ranger's camp.
87. Moved several new closet units into crew camp at Abol Field.
88. Installed new doors at Abol Field crew camp.
89. Traveled to Sherman Lumber to pick up lumber for work projects.
90. Installed window and door trim around doors and windows at Abol Field crew camp.
91. Built and installed extension jambs for windows at Abol Field crew camp.
92. Installed ceiling molding at Abol Field crew camp.
93. Trimmed out both skylights and installed corner molding at Abol Field crew camp.
94. Completed upstairs at Abol Field crew camp (interior walls).
95. Installed baseboard molding in all rooms at Abol Field crew camp.
96. Remodeled bathrooms at Abol Field crew camp.
97. Installed air conditioner covers on air conditioners at Headquarters, Warehouse and Director's apartment.
98. Cleaned up Abol Field crew camp and moved out all lumber, tools and equipment.
99. Piled lumber and covered lumber on porch at Abol crew camp.
100. Built lumber rack in carpentry shop and stored lumber on rack.
101. Replaced locks on Director's garage and repaired entrance door.
102. On 11/24/99 attended forklift training session provided by Maine Department of Labor.
103. Replaced bathroom wall panels around lavatory in the men's bathroom at Park Headquarters.
104. Built and installed a set of birch cabinets for reservation office at Headquarters.
105. Cleaned out pole barn and sorted junk lumber from good stock.
106. Sanded yard at Headquarters, Warehouse and Maintenance Shop when icy.
107. Removed entrance door and frame at Abol Field crew camp so we could move in disability-friendly shower.
108. Took out disability-friendly bathroom door and frame, enlarged opening and moved in disability-friendly shower at Abol Field crew camp.

109. Applied three coats of urethane on birch cabinets for reservation office at Park Headquarters.

<p style="text-align: center;">BAXTER STATE PARK ANNUAL REPORT MAINTENANCE DIVISION – AUTOMOTIVE MECHANIC Timothy Sides</p>

	<u>Hours Worked</u>
Shop	1,392 hours
Office	73 hours
In Park	231 hours
Meetings	8 hours
Training	<u>12</u> hours
Total	1,716 hours

VEHICLE/EQUIPMENT INFORMATION

Battery Replacement/Recharge	No.	11 – new
Body Repair/Painting	No.	24
Brake Repair	No.	8
Canoe/Boat Repair	No.	-
Chain Saw Repair	No.	2
Clutch Repair	No.	-
Electrical Repair	No.	31
Exhaust System Repair	No.	12
Front End Repair	No.	5
Generator Repair	No.	2
Motor Repair (incl. Valves)	No.	-
New Tires installed	No.	48
Outboard Repair	No.	-
Rear End Repair	No.	5
Road calls for Park Equipment	No.	3
Snowsled Repair	No.	7
State Vehicle Inspections	No.	27
Tires Repaired	No.	22
Tune ups	No.	2
Universal Joint Repair	No.	3
Vehicles Serviced (grease, oil)	No.	115
Waterpump Repair	No.	-
Window Replacement	No.	1

The above is a list of equipment repairs by the Mechanic. Below is a list of services

performed outside the garage complex:

January

1. Plowed snow on January 4, 7, 12, 13, 15.
2. Sanded grounds on January 4, 19, 20, 25.
3. Pushed back snowbanks with backhoe.
4. Worked on winter rescue sled on January 8th.
5. Hauled truckload of salt sand from Medway Dept. of Transportation on January 22.

February

1. Plowed and sanded Millinocket grounds on February 3rd.
2. Hauled truckload of salt sand from Medway to Millinocket on February 3rd.
3. Installed new hydraulic plow pump on plow truck on February 3rd.
4. Unloaded requisitions of trucks at Supply Facility on February 3, 4, 12.
5. Unloaded trailer load of cedar and piled near the pole barn on February 4 and 9.

March

1. Plowed snow at Millinocket on March 8, 15, 16.
2. Hauled disabled and repaired snowsled to and from Abol Bridge March 12, 15.
3. Traveled to Scientific Forestry management Area (SFMA) for vehicle repair.
4. Reorganized the Mechanic's parts room on March 22, 23, 25.
5. Installed new tire changer in garage on March 25.
6. Welded drain fitting on the portable fuel tank.

April

1. Moved recycle bin to Headquarters parking on April 2.
2. Transported power sweeper to and from Cormier Equipment Rental April 9, 12.
3. Assisted Park Ranger Robert Howes with cell phone antenna installation/testing at Chimney Pond on April 14.
4. Unloaded 41 cases of paint at Supply Facility on April 16.
5. Traveled to Matagamon area to do repairs on Forest Service bulldozer on April 23.
6. Assisted in Millinocket grounds clean up on April 26.
7. Removed plow and sander from dump truck on April 27.

May

1. Assisted moving bulletin board and mailboxes to the new mailroom at Headquarters on May 4.
2. Built steel rack and painted and bolted on Park truck #15 on May 6 & 7.
3. Maintained and cleaned portable air compressor on May 20.
4. Serviced and cleaned Park vehicle #19 for trade-in on May 21.
5. Assisted Park Carpenter and Park Ranger Barry MacArthur install toolboxes and racks on May 24.

June

1. Attended chain saw training June 6.
2. Traveled to O'Connor GMC in Augusta to inspect used dump truck on June 8.
3. Traveled to Levant to inspect and recommend to purchase a 1988 GMC C-70 dump truck on June 10.
4. Hauled loam from Crystal to Abol Field on June 21, 22, 23, 24, 28.
5. Hauled loam from Crystal to Director's residence June 25, 29.
6. Serviced and cleaned vehicle #18 on June 14 for State auction.
7. Serviced and cleaned vehicle #3 on June 30 in preparation of trade-in.

July

1. Hauled loam from Crystal to Abol Field on July 1, 2, 6, 8.
2. Hauled loam from Crystal to Director's residence on July 9, 15, 16.
3. Prepared truck #25 on July 6 for trade-in.
4. Traveled to SFMA for vehicle repair on July 14.

August

1. Stamped 24 highway cones with BSP marking on August 3.
2. Assisted in making a sling for septic tank removal on August 17.
3. Mounted new trailer jack on sled trailer on August 2,, 3.
4. Built a back rack for truck #24 on August 31.
5. Hauled loam from Crystal to Millinocket on August 19, 20.
6. Hauled a load of loam from Crystal to Kidney Pond on August 27.

September

1. Replaced Kidney Pond lawn mower engine on September 1.
2. Assisted lowering large BSP entrance sign at Millinocket and moved sign to Carpenter shop for repairs on September 8.
3. Prepared 4 snowmobiles on August 16 for State auction
4. Attended industrial trade show in Bangor on September 23 to look at forklifts.
5. Cleared brush along fence around garage and McDonald's on September 27.
6. Traveled to Matagamon for vehicle repair on September 29.

October

1. Built stand for tire spreader on October 5.
2. Took vehicle #19 to Lincoln on October 6 for warranty work.
3. Piled firewood for the garage on October 15, 22.
4. Prepared vehicles #9 and #16 on September 19 and 22 for the State auction.
5. Serviced newly purchased Park van on September 15 for Park use.
6. Hauled truck and snowmobiles to Surplus Property in Augusta for auction.
7. Assisted moving 20 cases of Park books from the garage attic to upstairs storage area of Park Headquarters on October 29.

November

1. Installed plow and sander on dump truck on November 10, 15.
2. Loaded plow truck with salt sand in Medway on November 15.

3. Cleared bay in pole barn for plow truck on November 15.
4. Loaded trailer with auction materials on November 18.
5. Hauled surplus property to Augusta on November 22.
6. Attended forklift training on November 24.

December

1. Repaired rock rake on December 1 & 10.
2. Replaced ratchet and strap on the dolly truck on December 3.
3. Welded hard surface rod to wear points on backhoe on December 14.
4. Installed larger and wider wheels on large sled trailer on December 15.
5. Repaired SFMA sled trailer on December 14 and 21.
6. Mounted and wired utility lights on rear cap of vehicle #27 on December 27.

REGION II CAMPGROUND AND PARK RANGER MAINTENANCE REPORT

Robert Howes Park Ranger II, Jodi Tollett-Browning Ranger I

1. Troubleshoot, repaired, upgraded, maintained eighteen solar powered systems throughout Park (considerable time).
2. Troubleshoot, repaired, installed maintained communications systems throughout Park – big year for equipment failure (major project).
3. Preplanned replacement antenna site on Burnt Mt., cleared site, built 8'x8' building.
4. Troubleshoot septic venting problems at Park Ranger camp at Togue Pond.
5. Traveled to Augusta, three trips, to O'Connor dealership for truck two-way radio problems.
6. Compiled annual report data.
7. Repairs and maintenance to sled fleet and totesleds.
8. Transported gas (100-120 gals.) from Abol service area to Togue Pond.
9. Routine service of outhouses in summer and winter.
10. Checking of winter parties, patrolling/checking sleds, buildings.
11. Shoveled buildings and cleaned chimneys.
12. Routine grooming of Roaring Brook and Chimney Pond trails.
13. Cleaned off roof edges, routinely – preventing ice buildups.
14. Hauled propane, wood, lean-to materials, peat moss and bark, requisitions to Chimney Pond.
15. Assisted Trail Supervisor with hauling of walkway materials to Basin and Whidden Ponds.
16. Relocated dead deer off Abol Ski Trail.
17. Washed and waxed Park truck.
18. Assisted Supply Clerk with radio inventories.
19. Changed propane tanks as needed Togue Pond area.
20. Moved 58 truck from Waterville to Millinocket.
21. Investigated vandalism at Togue Pond Gate.
22. Installed antenna anchor points/re-righted antenna at Chimney Pond Ranger

- station.
23. Assisted Mechanic at Millinocket Support Services, trucks, tractors, etc.
 24. Plowed road from mile 14 on Golden Road to Togue Pond.
 25. Walked road between Togue Pond and Pockwockamus Rock picking snowsled track studs, washer, bolts, and debris.
 26. Cleaned and serviced, stored sled fleet in the spring.
 27. Installed eyebolt lock system on overhead door at Togue Pond.
 28. Tested yagi antenna (cell phone) at Chimney Pond for better reception.
 29. Changeover of seasonal signage/put up portable gates during mud season.
 30. Assisted with installation of law enforcement equipment in new Park trucks.
 31. Transported tractors throughout Park as needed with truck and trailer.
 32. Checked vandalism problem at Abol Stream crossing.
 33. Mowed lawns at Togue Pond.
 34. Assisted with Kidney Pond plumbing on 250-gallon overhead tank.
 35. Patrolled West Branch lands and Appalachian Trail.
 36. Assisted with cleaning Togue Beach area.
 37. Rebuilt cellar storm windows on Park Ranger camp at Togue Pond.
 38. Troubleshoot Mt. View camp water leak problems and repaired.
 39. Cleaned refrigerator burners at Hidden, Mt. View Camp and Visitor Center bunkroom.
 40. Dug out beaver dams at Togue Pond culvert.
 41. Reviewed potential hydropower at Nesowadnehunk Field.
 42. Replaced lock on Visitor Center bunkroom at Togue Pond.
 43. Dug postholes for signs at Kidney Pd. And Foster Field.
 44. Dug vault holes at Abol Field and Katahdin Stream for new toilets.
 45. Spread calcium around Togue Pond complex to lessen dust problem.
 46. Hauled gravel throughout Park to various locations with erosion problems.
 47. Installed safety chain on cupboard door to avoid contact with gaslight.
 48. Assisted ME Forest Service with weather station installation at Togue Pond Gate.
 49. Assisted with septic pumpouts at Togue Pond.
 50. Weedwacked around Patten radio repeater site.
 51. Transported five sleds to Millinocket for auction purposes.
 52. Investigated Camp Kieve/stolen ATC items.
 53. Coverage of campgrounds during personnel shortages.
 54. Relocated SFMA power system from Telos Road facility to Hemlock Road facility.
 55. Assisted with shingling project at Nesowadnehunk Field.
 56. Assisted moving thirteen closets from Millinocket to Abol Field complex.
 57. Changed flat tires/trucks, trailers.
 58. Loaded trailer with firewood and hauled to Roaring Brook for winter use.
 59. Assisted with culvert replacement along tote road.
 60. Relocated flagpole at Togue Pond.
 61. Set rocks along tote road at Togue Pond Beach.
 62. Burned debris pile at Roaring Brook service area.
 63. Screened job applications/participated in interview process for hiring seasonal personnel.

64. Set up work schedules of employees.
65. Set up job expectations/evaluations with employees.
66. Supervision of Park volunteers, V.F.P., ME Bound, and other volunteer groups.
67. Handling employee complaints: working on resolving personnel disputes (time consuming).
68. Rebuilt podium (Togue Pond) that had been vandalized at gatehouse.
69. Assisted with spring clean up around Millinocket facility.
70. Removed air condition covers on Millinocket Headquarters building and cleaned for storage.
71. Assisted with interior construction at Abol Field housing complex.
72. Cut blowdowns – cleaned debris from tote road throughout Park.
73. Assisted with project work at Daicey and Kidney Ponds.
74. Assisted Dead River personnel with refrigerator repairs and relocations.
75. Hauled and dispersed new beds and mattresses at several campgrounds.
76. Assisted with clean up around Nesowadnehunk Field garage.
77. Hauled posts for picnic shelter upgrades.
78. Assisted with shingling projects at Daicey Pond and Nesowadnehunk Field.
79. Hauled camper firewood at Abol service area to Nesowadnehunk Field.
80. Woodburned signs for Kidney Pond (cabin photo board library display).
81. Assisted with workshop organization and clean up.
82. Coordinated Volunteer For Peace service projects throughout the Park (two weeks).
83. Assisted with toilet vault installations at Daicey and Kidney Pond.
84. Hauled propane tanks to various Park locations.
85. Cleaned chimney for Nesowadnehunk Field Park Ranger camp.
86. Assisted with east wall replacement of Matagamom Gatehouse.
87. Daily cleaning of culverts plugged by beaver.
88. Constructed set of snowsled ramps.
89. Burned debris pile at Nesowadnehunk service area.
90. Regularly cleaned, washed and waxed Park truck.

KIDNEY POND CAMPS – CRI Neal Sleeper, Joanna Thorpe, Eric Cookson

1. Opening/closing of campground; routine daily cleaning of cabins, sites, outhouses, waterlines filled and drained.
2. Blacken stoves and pipes.
3. Laid plywood flooring and installed plywood ceilings in Cabins 6 & 7.
4. Removed loam pile near woodpile.
5. Spot scraped and stained all cabins, including trim and door trim; painted decks, picnic tables, cabin floors.
6. Constructed several new screen doors.
7. Modified library and Cabin #5 to be disability-friendly.
8. Replaced mattresses and box spring covers as needed.
9. Prepared Foster Field camp for volunteers.

10. Put out and took in canoes, paddles, life vests, etc.; beginning and closing of seasons.
11. Readied Nesowadnehunk Stream camp for staff use.
12. Cut and removed hazardous trees in campground.
13. Repaired furniture, chairs, etc., as needed.
14. Jacked and leveled OJI camp.
15. Moved eight to ten cords firewood into pole barn.
16. Rebuilt Lily Pad landing.
17. Removed old log pile and hauled to Roaring Brook service area.
18. Painted BSP logo on all paddles.
19. Replaced signs and posts as needed.
20. Two old underground septic tanks found and removed
21. Dismantled old military trailer.
22. Repositioned flagpole and painted.
23. Stained propane storage shed.
24. Construction of several cook tables and woodboxes; work performed by Volunteers for Peace.
25. Photo board of Kidney Pond cabins, interiors finished and mounted in library.
26. Toilets readied (hydrated) for pumpout purposes.
27. Replaced propane lights as needed.
28. Former wood drop site seeded and mulched.
29. Routine mowing of lawns and grounds.
30. Steps on Cabins 6 & 7 and workshop ramp modified.
31. Removed large downed maple tree from Nesowadnehunk Stream above Kidney Bridge on Kidney Pond road.
32. Screened window of Nesowadnehunk Stream camp.
33. Quarter-round molding installed in library and Moosewood cabin.
34. Clearing and cleaning of blowdowns, debris Kidney Pond and pole barn.
35. Moss buildup cleared from cabin roofs.
36. New skidplates installed on canoes.
37. Replaced several ax and maul handles.
38. Cut up old boards for camper kindling.
39. Prepared campground for Advisory/Authority meetings.

DAICEY POND – CRI Gabriel Williamson, CRI Marcia Williamson, CRI Eric Cookson

1. Opening and closing of campground, spring/fall; waterlines, cabin cleaning, daily outhouse cleaning.
2. Replaced old signposts and signs.
3. Repairs to windows, glazing, glass replacement and cleaning.
4. Jacked and leveled several camps and porches.
5. Stained cabins, decks, porches, picnic tables, railings, posts, ramps; painted floors of several cabins, doors and trim.
6. Repaired – replaced screens of several cabins.

7. Replaced bumper logs in parking lot.
8. Upgraded decking on Cabin #6 to be handicap friendly.
9. Constructed gravel ramp for Cabin #6.
10. Constructed new foundation for Ranger outhouse.
11. Cleared grass and branches around fireplaces to meet code.
12. Replaced Cabin #11 outhouse; hauled older one to burn pile.
13. Polyurethaned canoe paddles.
14. Constructed new hiker sign out box.
15. Mowed lawns and grounds.
16. Jacked and leveled library, installed two new sill logs; shingled roof.
17. Woodstove maintenance, blacken, ash removal, stovepipe replacement.
18. Cleared blowdowns on local trails; Daicey Pond and Park tote road.
19. Filled woodshed; split kindling.
20. Pruned trees and brush throughout campground.
21. Removed old boat dock; built new one.
22. Removed and broke up old cement steps in front of Ranger's camp.
23. Shoveled and buried six outhouse contents.
24. Hauled gravel, stones and landscaped walkway to Ranger camp.
25. Unloaded and peeled several cedar logs.
26. Reinstalled repaired tires on equipment trailer.
27. Replaced several skidplates on canoes.
28. Cleaned waterbars on Daicey hill road.
29. Constructed new cooking tables for porches.
30. Raked pine needles of cabin roofs.
31. Patched leaking roofs.
32. Installed new bedframes in cabins.
33. Relocated cedar logs for storage.
34. Organized and cleaned tool shed.
35. Equipment maintenance – chainsaw, lawnmowers, waterpump, hand tools.
36. Constructed rock wall (erosion control) near fireplace #4.
37. Hydrated outhouses for pumpout.
38. Replaced propane tanks on cabins.
39. Prepared Cabins #4 & #5 for winter camping season.

ABOL – CRI Thomas Lohnes

1. Opening and closing of campground spring/fall; waterlines, campground cleaning, daily outhouse cleaning.
2. Repaired broken water pipes in Ranger camp.
3. Routine cleaning of sites, fireplaces, grounds.
4. Constructed new cupboard door and two drawers of Ranger camp kitchen.
5. Painted floors in Ranger camp.
6. Constructed new hiker register for porch.
7. Cleaned and organized workshop.

8. Covered three old toilet pits at Abol Scout area.
9. Installed new doors on workshop.
10. Stained Abol Field outhouse, polyurethaned interior, hung toilet and dispensers.
11. Stained steps, deck, garage doors, sign posts, buildings, signs.
12. Hauled wood debris to Roaring Brook service area.
13. Painted steel gate at Abol fuel depot.
14. Cut, split fallen trees in campground.
15. Cut blowdowns, cleaned road of debris.
16. Assisted Park Carpenter installing two solar tubes in Ranger camp.

<p>KATAHDIN STREAM – CRI Bruce White, CA Christian McGinn, CA Joseph Lillis (Acting Capacity)</p>
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1. Opening and closing of campground, spring/fall, waterlines, campground cleaning, daily outhouse cleaning.
2. Routine hauling of camper firewood from Abol service area.
3. Maintenance of lawnmower, chainsaw and firepump.
4. Repaired screens on Ranger and Assistant Ranger camps.
5. Cleared blowdowns and debris from campground and Park tote road after high winds.
6. Assisted with opening of Nesowadnehunk Field Campground.
7. Routine mowing of Katahdin Stream and Foster Field grounds.
8. Stained buildings, picnic tables and shelter, signs, posts.
9. Constructed two disability-friendly picnic tables.
10. Set out and inspected canoes at Grassy and Elbow Ponds.
11. Maintained River Driver Gravesite.
12. Assisted Dead River with gas and appliance cleaning.
13. Cleaned up an unauthorized site at Abol Stream on AT.
14. Tested fire equipment.
15. Built shelving for Ranger camp.
16. Assisted with Slide Dam shelter log replacement and roof shingling.
17. Hauled gravel to repair around dam on Katahdin Stream.
18. Rebuilt cribbing at Lean-to #1.
19. Routed five signs.
20. Replaced five signposts at Foster Field Group area.
21. Set several posts/signage in day-use parking lot.
22. Hydrated outhouses and helped with toilet pumpouts.
23. Jacked, leveled, replaced cinder block with round concrete pads of Ranger camp.
24. Tore down block chimney at Assistant Ranger camp, filled in hole and shingled, repaired ceiling.
25. Cut and split firewood.
26. Hauled granite from Nesowadnehunk Field to Katahdin Stream for season 2000-step project.
27. Changed padlock combinations at several locations.

28. Assisted with culvert replacement along tote road.
29. Assisted Park Carpenter with Abol Field housing project.
30. Moved appliances, furniture, beds, from Pine Cove and Mt. View Camps.
31. Set up new woodstove arrangement in Assistant camp.

NESOWADNEHUNK FIELD – CRI Mark Varney, CA Michael Martin
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1. Opening and closing of campground, spring/fall, waterlines, campground cleaning, daily outhouse cleaning.
2. Routine hauling of camper firewood from Abol service area and McCarty Field.
3. Maintenance of lawnmower, chainsaw and firepumps.
4. Stained buildings, picnic tables, signs, posts, structures.
5. Replaced old signposts.
6. Removed old toilets.
7. Replaced posts and shingled shelter at Slide Dam Picnic area.
8. Replaced flagpole.
9. Replaced shingles on picnic shelters.
10. Reorganized toolshed.
11. Reglazing of windows, replacing of screens on buildings.
12. Painted interior walls, polyurethaned window frames of living room in CRI camp.
13. Mowing lawns and grounds at campground day use area and group area.
14. Construction of wire fence for beaver problems at culverts.
15. Cut limbs, removed debris to meet fire code at campsites and picnic area.
16. Cut trees and brushed out sites for disability-friendly picnic table at Marston Trailhead.
17. Repaired doors, hasps, hinges and windows.
18. Cleaned chimney in Ranger's cabins.
19. Cut blowdowns, cleaned debris from tote road.
20. Replaced gas light in crew camp.
21. Cleaned and scrubbed interior of CRI Ranger cabin after winter use.
22. Cleaned up old log pile and debris behind garage.
23. Constructed several picnic tables.
24. Spread gravel throughout campground in low spots and erosion areas.
25. Several improvements to CRI Ranger camp, painting interior, polyurethaned cabinets, etc.
26. Improvements to disability-friendly site #23.
27. Assisted at Katahdin Stream Campground with cribbing project.
28. Covered of old cement vault.
29. Improvements to crew camp; staining, repairs, general maintenance.
30. Hauled roofing materials from Millinocket to Nesowadnehunk Field.
31. Relocated several signs after vandalism.
32. Transported recyclables to Recycle Center in Millinocket.
33. Stripped, shingled roof, replaced chimney at CRI camp. Hauled old shingles to service area.

34. Cut and split wood for Ranger use.
35. Assisted with building repairs at Matagamon Gatehouse.

TOGUE PONDS – CA Sara McBride

1. Opening and closing of Visitor Center, Trapper John, Administration Camp, waterlines, plumbing fixtures, daily cleaning and coverage of Togue Pond day use area.
2. Mowing of lawns and maintenance of grounds.
3. Placement of large rocks along tote road near beach area.
4. Replacement of old dumpster.
5. Cleaned refrigerator burner in bunkhouse.
6. Repaired damaged door on changing room at Togue Pond Beach.

All Campground Rangers perform routine maintenance including opening campgrounds by cleaning sites, fireplaces and toilets and removing debris accumulated during the winter months. Also housing facilities are cleaned. The water systems are readied for seasonal use. During seasonal use of facilities toilets, sites, and fireplaces and grounds are maintained and inspected daily.

ROARING BROOK – CRI Stewart Guay, CA Kevin Donnell
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1. Extra effort is needed to clean up wood chips, litter and debris, and a thorough scouring is needed to clean the bunkhouse facility after extensive winter use.
2. Trash is boxed up and 13 empty propane cylinders brought down from Chimney Pond during the winter is loaded and hauled to Millinocket.
3. The lawn mower was serviced as needed and lawns were mowed regularly.
4. A hard gravel path for wheel chair use was built between #20 tentsite and the nearest toilet facility.
5. Handrails were placed in toilet buildings.
6. Old steel that accumulated for many years was removed from the wood disposal area and hauled to Millinocket.
7. Ditches located in the campground were cleaned of wood and leave debris.
8. Two shelving units were built in the CRI facility.
9. The chainsaw was serviced, cleaned and sharpened for blowdown clean up and firewood project.
10. Firewood for resale was repeatedly brought over from Abol service area on a

- regular basis. This process has allowed for considerable improvement in campground vegetation regeneration.
11. Blowdowns were removed from the immediate trail system and also periodically from the road system.
 12. The screen door on the CRI facility was repaired.
 13. The south side of the CRI building was stained brown (channel rustic siding installed previous year) and the trim was painted.
 14. The assigned campground vehicle was serviced regularly and washed and waxed.
 15. Rocks that had been left after DOT grading were removed from road when necessary.
 16. A new flagpole was cut, painted and installed.
 17. Four cord firewood to be hauled and used at Chimney Pond for the winter was cut, split and hauled to Roaring Brook from Togue Pond.
 18. Assisted with cleaning of day use area at Togue Pond Beach on an assigned basis.
 19. Made modifications to fireplaces by removing limbs, trees, or mowing according to specifications determined by the Maine Forest Service and Baxter Park.
 20. Filled in hole left after the removal of the old toilet facilities at Rum Brook.
 21. Repaired window in bathroom of CRI facility.
 22. Built trail from the day use parking lot to the camper parking lot for use by both for a new toilet unit.
 23. Replaced signposts for tentsites and other signs as required.
 24. Polyurethaned inside Rum Brook outhouse.
 25. Hung a new sign at the service area at Rum Mt. giving directions for its use.
 26. Hung new signs to be used at the reserved day use area parking area.
 27. Stained outhouses by tentsites 23 and 24.
 28. Continued to watch for and eliminate hornet or wasp nests in day use areas.
 29. Repaired front porch entryway at campground office.
 30. Replace three posts on the Rum Mt. picnic shelter.
 31. Repaired four picnic tables.
 32. Cut, split and stacked a pickup load of firewood for crew camp and CRI camp.
 33. Assisted with waste removal and clean up of three toilets in campground.
 34. Removed debris from all the major culverts on the Roaring Brook road.
 35. Rebuilt tiering at site #3 at Avalanche Field.
 36. Installed 35 feet of bog bridging between lean-tos and toilets in campground.
 37. Prepared material and marked areas where bog bridging will be transported by snowsled during the winter months.
 38. Hauled propane from Millinocket to Roaring Brook to be transported to Chimney Pond during the winter by snowmobile.
 39. Hauled gasoline to Roaring Brook to be used during the winter months.
 40. Assisted with completion of interior paneling at the Abol Field crew facility.
 41. Prepared three purlins for transportation to Chimney Pond for lean-to construction.

CHIMNEY POND – CRI Greg Hamer, CA Frank Taylor
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1. Early spring maintenance included extensive cleaning and deodorizing the bunkhouse, crew camp and CRI facility after considerable use from the previous winter.
2. The upstairs portion of the CRI facility was insulated with Styrofoam between rafters and covered over with plywood.
3. Requisitions were sorted and placed in appropriate locations.
4. Removed blowdowns from the campground area.
5. Waste that had accumulated from toilets during the previous winter was collected and placed in bins to start composting processes.
6. Piled and stored firewood that was brought up the previous winter.
7. Stained the office fence brown.
8. Peeled 2-sided cedar logs and purlins to be used on the new lean-to #8.
9. Removed blowdowns from waterline area.
10. Scraped and stained the flagpole.
11. Stained #9 lean-to.
12. Painted walls and floors of the upstairs of CRI facility.
13. Constructed rooms in upstairs area for Solar System components, and for general storage of climbing equipment and search and rescue material.
14. Installed a new cellular phone antenna at CRI building.
15. Repaired wind gauge.
16. Moved rocks to and rippapped along the shoreline at Chimney Pond.
17. Straightened, stained and/or replaced signs and posts in campground as needed.
18. Cut, split and stacked kindling to be stored and used during the winter months.
19. Sorted through and organized the rescue gear stored upstairs.
20. Scraped and stained inside of office porch.
21. Monitored and made changes to display case located on the end of the bunkhouse.
22. Dirt and forest debris was removed from the waterbars and the drainage ditch that are placed in trail sections of the campground for erosion control.
23. Gravel and rocks were hauled to locations in pathways.
24. Brush was trimmed back along pathways in the campground path areas.
25. The old #8 lean-to was dismantled and cut up for firewood, and the area was refurbished.
26. The front porch on the CRI facility was jacked and leveled and the sill was removed and replaced.
27. The ceiling of the front porch was insulated, and vented on the outside, and was strapped in preparation for the finished paneling.
28. Chainsaws and the small generator were checked over and repaired.
29. The new lean-to #8 was stained.
30. Periodically the area trails were checked over for litter or damage.
31. Davis Pond lean-to was inspected and cleaned regularly.
32. The old firewood behind the crew camp was cut, split and stacked for bunkhouse use.
33. New window covers for the north side of the CRI facility were built.
34. New steps replaced the old ones that lead into the office of the CRI cabin.

35. Removed all human waste from toilets and composted so toilet facilities would be ready for winter campers.
36. Repaired windows and doors to be ready for winter use.
37. Prepared trash accumulated during the summer and placed it on the front porch to be hauled out during the winter by snowmobile.
38. Moved all empty propane cylinders from their use areas to #1 lean-to.
39. Used shingles were relocated from construction areas to lean-to #8 to be hauled out during the winter.
40. The front pitch of lean-tos #8 and 9 were braced for winter.
41. Placed snow drag in area so it can be used during the winter.
42. Refrigerators were defrosted, and the bed was moved from the front porch to the bedroom in preparation for winter use.

<p>RUSSELL POND – CRI Brendan Curran, CA Dan Randall</p>
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1. Commenced the season by flying most of the necessary personal supplies to Wassataquoik Lake and transported them by backpack to Russell Pond.
2. Moved all the canoes, paddles and life preservers to the appropriate locations.
3. Cleaned fireplaces and toilets, and raked fireplaces at outlying sites including Wassataquoik Stream, Wassataquoik Lake, Little Wassataquoik Lake, Pogy, and Davis Pond.
4. Scraped and painted toilets at sites #16 and 17.
5. Removed waste from five toilets in the campground.
6. Cut and removed blowdowns from the area trails within approximately a three-mile radius of Russell Pond.
7. Placed crossing logs at Turner Deadwater after receding water.
8. Replaced the complete water line from the spring to the CRI facility.
9. Scraped, stained and lettered signs in areas as needed.
10. Replaced the old rain gauge with a new one.
11. Checked shower system for leaks and installed a new bleeder valve.
12. Jacked front corner of main camp and installed a new cedar post.
13. Built new set of steps for the side door of main camp.
14. Planted fir and spruce for a screen to site #16.
15. Cut and removed brush from the helipad and area sites.
16. Replaced kevlar skidplate on the campground canoe.
17. Peeled logs at Deep Pond outlet and at Six Ponds for bog bridging and canoe racks.
18. Stained side porch and carrying beams on main CRI camp.
19. Installed ball vent valve on water heater for shower system.
20. Cut and peeled spruce to replace rotted sign post at Davis Pond.
21. Shored up stone base around privy near tentsite #16 and 17.
22. Continually applied quick-John and leafy material to toilets for composting.
23. Bagged up and carried out trash that had accumulated in shop and woodshed.

24. Cut to length and installed 2 x 8 floor stringers under CRI camp.
25. Replaced the old rain gauge with a new one.
26. Trimmed brush in campground paths as needed.
27. Cleaned out spare room in CRI installed new shelves and carried out materials that no longer were of use.
28. Replaced rotted campground canoe rack with a new one.
29. Continued annual repairs to "ankle knocker" bridge.
30. Disassembled old radio antenna mast and stored for winter haul out.
31. Constructed new canoe racks for Six Ponds canoes.
32. Cut down and removed old bridge over Turner Brook on Wassataquoik Stream trail.
33. Scraped and painted trim on main CRI camp and reglazed several windows.
34. Cut, split and stacked kindling made from left overboard ends that had accumulated under the CRI facility.
35. Cut and removed two large stumps from the front end of the workshop.
36. Replaced and reglazed two panes of glass in office window.
37. Removed and bagged several bags of junk from an old dump near campground.
38. Eradicated and removed several bees' nests along main trail systems.
39. Reset and re-tensioned turnbuckles that are part of the antenna support system.
40. Flagged and partially cut short trail relocation at outlet of Little Wassataquoik Lake.
41. Installed glass and glazing in old sash and installed in woodshed, trimmed and painted.
42. Assisted in water quality testing at Weed Pond with intern Jason Saucier.
43. Cleaned up blowdowns and debris after hurricane Floyd and maintained daily checks of water levels and relayed information to appropriate Park locations.
44. Completed inventory and requisition orders for the 2000 season.
45. Built cedar benches for lean-tos #3 & 4.
46. Spent time training assistant Meg Ounsworth for fall coverage at Russell.
47. Cleared brush and dug hole for new privy on Wassataquoik Lake Island
48. Removed and carried fish survey boxes from outlying ponds back to Russell.
49. Cut and peeled spruce logs for crossing over Turner Brook.
50. Jacked up Wassataquoik Lake lean-to and installed footers and posts.
51. Removed stream crossing logs and stored at site for winter.
52. Prepared trash and other unusable material for winter haul out.
53. Split and stacked a usable amount of kindling for winter.
54. Shoveled waste from privies and disposed of it.
55. Checked and prepared bunkhouse facility for winter use.

<p>SOUTH BRANCH POND – Keith Smith CRI, Charles James CA, Joseph Lillis CA Acting Capacity, Paul Sannicandro CA Acting Capacity</p>
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1. Flagged, cut and brushed out a trail from the South Branch Mountain trail to the canoe site on Lower South Branch Pond.

2. Placed canoes, paddles and life preservers at pond locations for public use.
3. Serviced boats and motors and made them ready for emergency or administrative use.
4. Launched and secured the swim float and dock on Lower South Branch.
5. Uprighted and repaired the Upper South Branch Pond boat shed.
6. Spring cleaned the bunkhouse and deodorized and prepared for summer use.
7. Repaired public use facilities.
8. Transplanted several trees in the campground and day use areas.
9. Collected and installed rocks at the Lower South Branch outlet crossing.
10. Serviced lawn mower and mowed areas at South Branch, Trout Brook crossing, Burnt Mountain picnic area and McCarthy Field.
11. Removed alders from Upper South Branch outlet user area.
12. Stained toilet and picnic table at Burnt Mt. Day use area.
13. Dug holes and installed picnic shelter support posts at day use area Lower South Branch, also shingled shelter.
14. Replaced register box and posts at Burnt Mt. Trailhead.
15. Stained, painted picnic tables at South Branch.
16. Repaired holes in crew camp porch.
17. Installed signs and posts at McCarthy Field road junction.
18. Removed blowdowns from area trails and the tote road system throughout the season.
19. Readied several toilet and site areas so they would/could be used by those with disabilities.
20. Assisted with waste removal from 1000-gallon vault toilets.
21. Exterminate hornets, ants at buildings and campsites.
22. Stained fence beside office at South Branch.
23. Assisted with bush clearing on the South Branch Ponds road.
24. Planted reforestation area and landscaped tentsite #37.
25. Fireplaces were replaced in the day use area and lean-to 37.
26. Assisted with hauling picnic shelter purlins from the SFMA.
27. Mulched trees that were planted in the campground areas.
28. Assisted with backcountry patrols in the Fowler Ponds region with the removal of litter, cleaning sites and fireplaces and toilets.
29. Removed and disposed of waste from toilet at Upper South Branch Pond lean-to toilet.
30. Installed new signposts for Howe Brook and the canoe portage trail.
31. Stacked firewood in woodshed for administrative use.
32. Continually hauled firewood for sale to campers from McCarthy Field.
33. Painted new bulletin board and placed current information on it.
34. Cleared and prepared new canoe site near the inlet on Lower South Branch Pond where a new lean-to will be located in year 2000.
35. Installed signs and posts on the new trail to the canoe site.
36. Landscaped picnic area by placing rocks and spreading gravel.
37. Assisted backhoe operator removing large rocks from the lawn area at South Branch.
38. Installed an above ground firegrill in the day use area at South Branch day use

- area.
39. Removed brush and debris from bunkhouse area.
40. Finished installation of z-brick firewall in kitchen area at CRI South Branch.
41. Serviced Trout Brook DOT facility by mowing, week whacking and bush cutting.
42. Hauled surface gravel from Dwelley service area to South Branch day use area.
43. Stained sign and shelter posts at South Branch crossing day use area.
44. Began implementing scoop ditches and waterbars in the South Branch Pond picnic area.
45. Cut and draw shaved poles for fence railings.
46. Wood-rasped and polyurethaned handrails in disability-friendly toilets.
47. Assisted shingling new picnic shelter at Trout Brook Farm.
48. Assisted with culvert cleaning before and after rainstorms on the road system.
49. Assisted with repair of South Branch office radio antenna.
50. Assisted with hauling of rocks to be used as stepping stones at South Branch.
51. Fall projects included removing boat and swim docks, canoes, boats and motors, life preservers and paddles for winter storage.
52. Assisted with Matagamon gatehouse renovations by removing old log siding and installing a layer of boards and then channel rustic siding.
53. Raked leaves in facilities and used them for mulch around trees in campground.
54. Removed two old toilets to the Telos wood disposal area.
55. Completed inventory and requisition list for the year 2000.
56. Repaired small hand tools.
57. Hauled and stacked bunkhouse firewood to be used during the winter camping season.
58. Hauled spring supply of firewood from McCarthy Field to South Branch Pond.
59. Drilled and pinned shoreline restoration logs.
60. Stained outside and polyurethaned inside of two new toilets at south Branch Pond.
61. Secured lean-tos along shoreline by wiring to anchors.
62. Drained water systems and placed non-toxic anti-freeze in sink drains and toilets.

TROUT BROOK FARM – Dan Anderson CRI
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1. Campground coverage assistance was provided to South Branch Pond especially during the spring and fall season.
2. The lawn mowers were serviced and large lawn areas were mowed.
3. Weekly, monthly and seasonal forms were completed for report purposes.
4. Three picnic tables were built and stained, others were repaired and stained as required.
5. Trim work was completed and painted on the new shelter built the previous fall.
6. Blowdowns and brush were removed from the nearby trails, campground and road system.
7. Recyclables were taken to Millinocket transfer station.
8. Large alders were removed from the open field area at Trout Brook.
9. Routine patrols of the outlying ponds including Billfish, Littlefield and High and

- Long Ponds included removing litter, cleaning sites, toilets and fireplaces.
10. Assisted with construction of picnic shelters at South Branch Ponds.
 11. Dug up and repaired the underground waterline in Trout Brook Field between the year-round facility and the crew camp facility.
 12. Relocated, scraped and stained signposts.
 13. Spread gravel in various site locations.
 14. Built a covered picnic shelter in group area #3, putting on trim, painting, staining and shingling.
 15. Assisted installation of waterline in the new crew facility location south of Webster Lake to be used by woods crews in the SFMA.
 16. Assisted removal and disposal of waste in the outlying sites on Matagamon Lake.
 17. Assisted with training of a new Assistant Campground Ranger at South Branch Ponds.
 18. Assisted with reshingling of roof of CRI facility at Nesowadnehunk Field.
 19. Assisted with construction of two toilet facilities along the shore road at South Branch.
 20. Removed blowdowns along the road system caused by storms or high wind conditions.
 21. Assisted with restoration projects in the South Branch Pond day use area.
 22. Assisted with residing of east side of Matagamon gatehouse by removing old log siding and replacing it with a board sheathing and covering it with channel-rustic vertical siding. Construction debris was removed to Telos wood disposal area.
 23. Completed inventory and requisitioned material for the 2000 season.
 24. Hauled firewood for sale from McCarthy Field to Trout Brook on a regular basis.
 25. Regularly maintained K.P. Dam Campsite by raking site, cleaning toilets and fireplaces.
 26. Hauled a supply of firewood to be used by personnel and bunkhouse to Trout Brook Farm.

ALPINE RANGER – Stewart Guay

1. Snowshoed, shoveled holes and sidlings and cut blowdowns on Chimney Pond trail to make a passable snowsled trail (December to March).
2. Shoveled snow from Chimney Pond CRI facility to alleviate water damage.
3. Assisted Trail Supervisor constructing a ski trail from Round Pond to junction of Roaring Brook trail through the Rum Pond area.
4. Worked building a snowsled trail to Sandy Stream Pond to haul bog bridging material to Whidden Ponds area on Russell Pond trail.
5. Hauled 12 empty propane cylinders from a lean-to at Chimney Pond to Roaring Brook by snowmobile.
6. Removed all trash from Chimney Pond to Roaring Brook Campground.
7. Removed old used shingles from Chimney Pond to Roaring Brook Campground.
8. Built wood-carrying box for snowsled to haul firewood from Roaring Brook to Chimney Pond for use during the winter by the bunkhouse, campers and winter

Rangers.

9. Hauled 12 propane cylinders from Roaring Brook to Chimney Pond Campground.
10. Hauled two cord firewood from Roaring Brook to Chimney Pond Campground.
11. Regularly serviced and maintained snowmobiles and trail drags.
12. Assist with construction of personnel carrier to be used to transport personnel behind snowmobiles in case of emergency.
13. Hauled 24 – 2'x4'x8' from Millinocket to Chimney Pond Campground.
14. Hauled peat moss and bark mulch to Chimney Pond to be used during the summer months for composting waste.
15. Hauled one full size mattress from Abol Bridge to Chimney Pond Campground.
16. Assist with transportation of volunteer Search and Rescue personnel to and from Roaring Brook during training exercises.
17. Regularly cleaned toilets and bunkhouse facilities at Roaring Brook and Chimney Pond.
18. Hauled two-sided logs and purlins from Roaring Brook to Chimney Pond to be used in the construction of lean-to #8. Also lumber for the floor and roof were hauled.
19. Hauled insulation and plywood to Chimney Pond to be used for attic modifications to house for summer personnel.
20. Removed old insulation and sheetrock from the attic at Chimney Pond to Roaring Brook Campground
21. Hauled 1999 summer season requisitions from Millinocket to Chimney Pond Campground.
22. Reinstalled antenna at Chimney Pond Ranger station.
23. Hauled propane and supplies from Millinocket to Roaring Brook to be moved to Chimney during the 2000 winter.
24. Assisted Park Ranger with bank stabilization at Daicey Pond.
25. Assisted Park Ranger with culvert replacement above Katahdin Stream on the tote road.
26. Removed 20+ trees at Togue Pond gate for road widening purposes.
27. Filled gasoline drum at Roaring Brook garage to be used to fuel snowmobiles.
28. Moved from Roaring Brook Campground to Abol Field in late fall.
29. Burned wood debris at the Rum Mountain wood disposal area.
30. Installed windowpane in Trapper John cabin attic at Togue Pond.
31. Assisted Park Ranger with construction of snowsled ramps to be used to load snowmobiles on pickup truck.
32. Hauled spare snowsled (Polaris) from Togue Pond to Nesowadnehunk Field.
33. Removed stove, refrigerator and propane stoves from Hidden Camp and Pine Cove Camp at Togue Pond and stored in polebarn.
34. Begin work on boundary line (sanctuary) west of Abol Hill.
35. Routine patrol of Abol, Katahdin Stream and Daicey to check for people who may possibly want to camp in Park and/or climb Katahdin after October 15.
36. Assisted Trail Supervisor blazing and painting trails (Doubletop trail north side, ski trails, Foss & Knowlton ski trail).
37. Serviced. Cleaned and waxed assigned winter vehicle.
38. Removed all portable items from Mountain View Camp.

39. Removed overhead branches from the Kettle Pond Trail for skiers.
40. Constructed new lumber racks in lumber shed at Togue Pond polebarn.
41. Cleaned out and organized inside of Togue Pond polebarn.
42. Hauled some lumber from Millinocket polebarn to Togue Pond polebarn.
43. Erected partition in bunkroom at Togue Pond Visitor Center.
44. Removed blowdowns along the tote road after storms/high winds.
45. Flagged winter trail from Sandy Stream Pond to bog on nature trail to prepare for moving of bog bridging material using snowmobiles later in the winter.

TOGUE POND GATEHOUSE STATISTICS - 1999				
VEHICLE ENTRIES				
MONTH	#VEHICLES	%RESIDENT	#PEOPLE	%RESIDENT
May	1605	63	3927	64
June	3648	57	9889	58
July	5542	51	16204	51
August	6615	44	18904	46
September	1407	47	10774	51
October	2628	48	5796	50
November	255	52	492	58
TOTALS	21700	50	65986	52

	CLASS DAYS ON MT. KATAHDIN						
	May	June	July	August	Sept.	October	November
I	0	14	6	10	15	0	0
II	0	14	25	21	12	5	0
III	17	2	0	0	1	7	5
	4	0	0	0	2	19	22

DATES PARKING LOTS FILLED BY HIKERS							
	ROARING		KATAHDIN			SLIDE	LEDGE
	BROOK	ABOL	STREAM	DAICEY	KIDNEY	DAM	FALLS
May	30	22,29,30	30	30			
June	12,19,26	12,19,26	19,26	10,19	19		
July	1,3,4,7,13	3,7,12,17	3,10,11,12	3,11,21,26		29,30	
	14,15,17	24,28,31	17,24,31	27,28,30			
	18,20,23			31			
	24,26,27						
	28,29,30						
	31						
August	1,2,3,4,6	2,3,7,10	2,3,4,6,7	1,2,3,4,6,7	21	21	
	7,9,10,11	11,13,16	10,11,13	9,11,12			
	12,13,14	17,19,20	16,17,20	17,19,20			
	16,17,18	21,24,28	21,24,28	21,22,28			
	19,20,21						
	22,23,24						
	26,27,28						
Sept.	4,5,18,25	4,5,25	4,5,25,26	4,5,26			
	26						
October	2,10	2,10	2,10	2,10	10	2,10	
November							

MATAGAMON GATE STATISTICS - 1999						
VEHICLE ENTRANCES						
MONTH	VEHICLES			PEOPLE		
	TOTAL #	RESIDENT	%RESIDENT	TOTAL	RESIDENT	%RESIDENT
MAY	451	383	85	1174	1002	85
JUNE	674	500	74	1867	1487	80
JULY	1204	793	66	3674	2502	68
AUGUST	1187	722	61	3529	2201	62
SEPT.	688	393	57	1734	1043	60
OCTOBER	382	241	63	883	563	64
NOVEMBER	164	65	40	360	142	39
TOTALS	4750	3097	65%	13221	8940	67.60%
VEHICLE ENTRANCES						
	VEHICLES			PEOPLE		
	TOTAL#	RESIDENT	%RESIDENT	TOTAL#	RESIDENT	%RESIDENT
TOGUE PD.	21700	10883	50%	65986	34480	52%
MATAGAMON	4750	3097	65%	13221	8940	67.60%
TOTALS	26450	13980	53%	79207	43420	55%

TOGUE POND GATEHOUSE – Gatekeepers Diane Freelove, Jennifer Hall, Kristy Trainor, Colleen Burgess, Simone Rossignol, Rod Freelove, Acting Capacity

1. Duties of gatehouse personnel include regularly cleaning adjacent toilets, keeping the facilities clean and neat, ordering display material, greeting the public in an appropriate manner, compiling weekly and monthly reports as appropriate and dealing with regular shift financial forms.
2. New employees are trained in the operation of gatehouse duties by gate personnel.
3. As time allowed employees sorted through files and organized paperwork.
4. Opened gate at 5 A.M. on a trial basis from June 20 into October.

MATAGAMON GATEKEEPERS – Dana Miller, Ted Hanson, Helen Wood

1. Routine duties include cleaning and sweeping the office, and adjacent toilet facilities.
2. The lawn at the gatehouse, and at Matagamon landing is mowed regularly.
3. The toilet at the landing, and the gatehouse were scraped and stained.
4. Requisitions were sorted and organized and handout material was displayed in office.
5. Two picnic tables were scraped and stained.
6. Three pickup loads of firewood were cut, split and stacked in the woodshed.
7. Signposts and signs were stained brown and lettered with white paint.
8. A larger display case was installed at the office.
9. Polyurethaned two new office chairs and two table chairs for gatehouse.
10. Staff assistance was given to replacing the siding on the south side of the gatehouse and for installing two new windows and staining the siding.
11. Some time was used to travel to Trout Brook Farm to build fires in the crew camp in the fall.
12. All water was drained and supplies and the radio was turned in to Millinocket, along with all the financial forms and receipts.

BAXTER STATE PARK RANGERS REGION I – Barry MacArthur Park Ranger II, Loren Goode Park Ranger I, Thomas Chase Park Ranger I, Charlie Kenney Park Ranger I

Winter Maintenance

1. Winter brings regular servicing and maintenance to the mostly used snowmobiles.
2. The Russell Pond winter trail from South Branch to Russell was broken out, blowdowns removed and holes were filled in and the trail dragged for hauling supplies to and removing material from Russell Pond.
3. The old lean-to at Little East was removed by burning.

4. The trail to the old Horse Mountain tower was broken out for tower removal.
5. A pre-cut two-sided lean-to was hauled from Trout Brook Farm to Little East Branch.
6. Trees were blazed and painted south from the junction of the old Fowler trail the back way along the East Branch of the Penobscot River (approximately 3+ miles).
7. Constructed a personnel transport carrier at Millinocket to be used to transport Search & Rescue personnel for either training or emergency evacuations.
8. Serviced backhoe in Millinocket to get it ready to remove snow.
9. Assisted Trail Supervisor with the clearing of a ski trail between Rum Pond on the Roaring Brook road to Round Pond on the Park tote road.
10. Constructed a new drag designed to remove sidlings and fill large holes with fewer trips over the trails.
11. Occasional patrols were made on the tote road and side roads checking snowmobilers and skiers, and to check on parties camping within the Park.
12. Assisted with overhaul repairs to '50' sled trailer.
13. A trail was cut and cleared up the Little East Branch to Brayley Brook and then to Webster Lake.
14. Axe handles and head cases were installed on axe heads found at Togue Pond.
15. Toilets were checked and cleaned during the winter months at locations of use.
16. The portable generator was serviced and checked regularly while using at Trout Brook Farm.
17. Blowdowns were removed from the Park tote road after storms.
18. Two boxes for the Vehicle Restraining Devices (Togue & Trout Brook) were built.
19. The windows were removed from the Horse Mountain tower and the cab was removed and burned and the steel was hauled out to Trout Brook Farm by snowmobile.
20. Time was used working on and completing the annual report.
21. Rangers and others continued with Chimney Pond coverage covering on days off for Alpine Ranger Stuart Guay.
22. Repaired an aluminum tote sled used for light supplies hauling to chimney Pond.
23. Assisted moving the lean-to at Webster Lake from the old boathouse site to the outlet site at the east end of the lake.
24. Assisted transporting gear of injured camper (hot water burn) and the rest of the group to Matagamon landing.
25. Broke out the new Wadleigh bog trail and removed blowdowns, and dragged the trail in preparation for hauling bog bridging in about 1+ mile. The bog bridging was hauled in to site locations the following day.
26. The trail from Roaring Brook to Whidden Ponds was broken out and dragged and bog bridging was hauled into site locations.
27. Tote sleds were repaired whenever it was necessary.
28. Assistance was given to Park affiliated rescue teams by transporting men and equipment from Abol Bridge to Roaring Brook Campground.
29. Constructed steel totesled to be used by personnel in the SFMA.
30. Hauled building material for toilet to Wassataquoik Lake Island and Pogy Pond, and hauled bog bridging material to Deep Pond outlet and to Six Ponds canoe site.

31. Relocated snowmobile/ski trail from the brook south of Wassataquoik Lake to Wassataquoik Lake on the north side of the outlet.
32. Repaired drag for the Nesowadnehunk Field/SFMA areas.
33. Routinely assisted with plowing snow at Millinocket office, garage and supply building.
34. Broke out trail from the Park tote road to Burnt Mountain tower in anticipation of making repairs to the cab unit that stores the repeater.
35. Lumber and supplies were transported to Russell Pond by snowmobile and propane and trash was hauled to South Branch Pond Campground.
36. Hauled a winter damaged canoe from Six Ponds to South Branch Ponds and hauled Discovery canoe from South Branch to Six Ponds.
37. Broke out trail and removed blowdowns up onto Rum Mountain to provide route for Director to review possibility of Native American camping area.
38. Assisted with transportation of firewood from Roaring Brook Campground to Chimney Pond Campground.
39. Performed the requirements of a duty officer on weekends by covering radios for emergencies, checking buildings in Millinocket and firing the furnace at the garage.
40. Routinely checked skiers, snowmobilers and fishermen for lawful compliance.
41. Precut lean-to in Millinocket and transported it to Chimney Pond to replace #8 lean-to.
42. Prefabbed a lightweight portable bridge to be used to cross small shallow bottom streams and removed to be used somewhere else.
43. Prefabbed 10 picnic tables at Trout Brook to be transferred to areas of need.
44. Hauled foam insulation and plywood from Millinocket to Chimney Pond to be used to repair the attic for personnel use during the summer season.
45. Assist reinstalling diesel fuel tank on vehicle 56.
46. Canoes were transported by snowmobile from Trout Brook to Long Pond and Lower Fowler to be rented and used by the public.
47. Hauled cedar slabs from Medway in to the Russell Pond winter trail from South Branch.
48. Hauled a canoe to the Hudson Pond campsite to be rented out during the summer.
49. Constructed leg and seat sections for 10 regular table chairs.
50. Time was used to organize and plan a project list for the 1999 summer season.
51. Assisted with the transportation of a TV crew (Huey Long) from Chimney Pond to Abol Bridge.
52. Assistance was given to interviews for people interested in season work at Baxter Park.
53. Hauled plywood and construction lumber from Millinocket to Matagamom Lake then to Burnt Mountain to build an 8'x8' building for the repeater (to be built during the summer or fall season).
54. A lean-to that was hauled to Little East campsite by snowmobile was set up and shingled.
55. The tote road was plowed from Togue Pond to Daicey and Kidney Ponds and then up through the Park in April.
56. The old gravel pit along the East Branch of the Penobscot River was sloped and

- graded while the bulldozer that had been used to plow the road was available.
57. Assistance was given to paneling the inside of the new crew camp facility at Abol Field during early April.
 58. Assistance was given to Inland Fisheries and Wildlife with the stocking of brook trout at Abol, Round and Rocky Ponds.
 59. Removing brush from ditches and hand ditching so the road system could drain more quickly and open earlier became a spring priority.
 60. Trash was picked up and the lawn was raked at the Millinocket office complex.
 61. Each spring assistance is given to motorists getting their vehicles back on to the roads as they attempt to drive on snowmobile trails before the snow is gone and after it is no longer suitable for snowmobiles.
 62. The pole barn at Trout Brook Farm was cleaned out and reorganized.
 63. A new information sign was installed at Matagamon Gate.
 64. Gathered information concerning the approved septic system to be installed at the new crew camp facility at Abol Field.
 65. Cleaned out and washed inside and out of old vehicle 54.
 66. Assisted getting the water running at Mt. View camp.
 67. Dug hole for 2000 gal. septic tank to be installed at Abol Field and installed the tank and a distribution tank. Laid out and installed biodiffuser leachfield septic system according to site evaluator specifications.
 68. Built a set of steel racks to fit on body of the new 4x4 truck.
 69. Hauled and spread 16 loads of surface material from "T" Pond road to Roaring Brook road, two loads to the Togue gatebooth area and one load to Round Pond to cover road erosion.
 70. Hauled 200 yards of fill to be used around the new Abol crew camp facility.
 71. Installed boat and dock in Matagamon Lake and removed the dock in the fall.
 72. Used the rock rake to help level road and remove rocks starting from Togue Pond and going through to Matagamon Lake.
 73. Continued to monitor culvert blockage caused by beaver at Barren Brook, Doubletop camp and Phoenix road intersection.
 74. Assisted with plumbing repairs at Mountain View camp.
 75. Worked on the Roaring Brook road with the backhoe removing large rocks and ditching and filling areas of erosion and washout.
 76. Assisted DOT doing culvert work near Doubletop camp using BSP backhoe.
 77. Park Rangers were assigned to night patrols one night each week during the camping season.
 78. Assisted with crowd control at various trailhead locations.
 79. Routinely patrolled the backcountry sites in the Fowler Region checking for fishermen, removing litter and cleaning sites.
 80. Patrolled on Matagamon Lake by boat cleaning sites and toilets and checking fishermen.
 81. Hiked to Long and Lower Fowler Ponds and secured rental canoes and instituted the first rental canoe policy in these areas.
 82. Assisted with installation of dock and swim dock at South Branch Pond in the spring and with the removal of them during the fall.
 83. Removed blowdowns from area trails whenever possible and using trail system.

84. Assisted with the construction of a covered picnic shelter in the day use area at South Branch Pond including gathering posts, purlins and construction material.
85. Built 10 additional picnic tables for Trout Brook Farm and South Branch Pond.
86. Assisted with campsite fireplace inspection and assuring compliance with standards.
87. Repaired discovery canoe damage at South Branch Pond Campground that had come from Six Ponds.
88. Assisted with cutting out a trail to the canoe site at Lower South Branch Pond.
89. Assisted with the removal of waste from toilet vaults and disposal at the septic disposal area on the Black Brook service area.
90. Assisted with inspection and purchase of a second hand GMC 2-½ ton dumptruck.
91. Built new racks for #59 vehicle and installed a new box. Cleaned out old #59 vehicle, washing inside and out and installing a new radio in new vehicle.
92. Dropped small dumptruck off at Equipment Depot (Bangor) for a new body and brought the trail crew club cab truck back to Millinocket.
93. Assisted with soil tests for new site location of new crew facility south of Webster Lake in the SFMA.
94. Leveled pad on Tea Pond road to be used for road surface storage.
95. Hauled loam to Abol Field from Crystal to cover lawn and septic system at Abol Field with at least 4" of loam.
96. Repairs were made to the rock rake including building in boltholes with a welder and replacing bolts as needed.
97. Gravel that had set for several years at the Abol Scout area was loosened to assist with a shoreline restoration project overseen by an Eagle Scout project.
98. An additional 500' of waterline was installed along Abol Stream to add pressure to the existing system used by the DOT and the new Abol Field crew camp facility.
99. Disability-Friendly vault tops were installed near site specific campsites at Abol, Katahdin Stream, Daicey Pond, Kidney Pond and one to be installed at Roaring Brook Campground.
100. The cement steps were removed from the office at Daicey Pond.
101. Two-sided logs were removed from the small equipment trailer at Daicey Pond Field.
102. Holding racks were built to hold the flagpole against the building at Roaring Brook Campground.
103. Covered site #19 at Nesowadnehunk Field and filled and covered an old toilet vault with gravel.
104. Hauled and leveled surface material from Nesowadnehunk pit to Abol Field crew facility for the parking lot area.
105. Dealt with personnel matters, training employees and writing evaluations and expectations.
106. Dug holes and installed four new 1000-gallon toilet vaults at Roaring Brook, Abol Field, Katahdin Stream, Daicey Pond and Kidney Pond Campgrounds.
107. Hauled gravel and leveled beside the polebarn at Kidney Pond so firewood can be brought in and stored.
108. Seeded lawn at the Abol crew camp facility and watered as needed.

109. Hauled gravel from Abol pit to Roaring Brook Campground to fill in around newly installed toilet vault.
110. Installed new sign posts at Nesowadnehunk Field at Park tote road and campground intersection.
111. Constructed and routed several signs for the north portion of the Park.
112. Installed new bulletin board posts across from office at South Branch Pond.
113. Picked up and hauled several large rocks from Park tote road to south Branch Pond to be used for restoration projects.
114. Assembled and installed wallpole chairs and tables for Trout Brook Farm personnel.
115. Mowed around DOT camps north end and weedwhacked as needed.
116. Hauled and spread surface material from Dwelley Pit to day use area at South Branch Pond.
117. Built picnic shelter at group site #3 at Trout Brook Farm.
118. Hauled surface material from Nesowadnehunk Pit north approximately 1 ½ miles covering material hauled out of ditch by grader along Park tote road.
119. Hauled sand for backfill from Dwelley Pit to new crew camp facility in the SFMA.
120. Hauled gravel to SFMA to be used for a yard around the new camps.
121. Hauled some gravel from Dwelley Pit and filled holes on the Black Brook road.
122. Build slings to lift 2000 gal. Septic tank and installed it in approved site location at new crew camp facility in SFMA on the Hemlock road.
123. Ditched along the Park tote road from Black Brook Field north to Matagamom Gate and removed black mud.
124. Ditched along the South Branch Pond access road from Trout Brook Crossing to South Branch Pond removing black mud.
125. Worked rock raking the Daicey Pond road.
126. Removed bark from McCarthy Field to the Telos Service Area to be burned.
127. Rock raked the Roaring Brook road after DOT grading.
128. Rock raked Togue Pond to Abol Field after DOT grading.
129. Hauled rock screenings on Martin camp hill and graveled and then surfaced so as to provide an area where drainage ditch could be located.
130. Moved closet cabinets from Millinocket office to Abol Field Crew Camp.
131. Assisted with shingling the CRI facility at Nesowadnehunk Field.
132. Hauled screened rock from East Branch Pit to Trout Brook Farm to be used by Trail Crew to rebuild the crib on the north side of the footbridge across Trout Brook.
133. Finished laying out and covering leachfield and waterlines at SFMA crew camp by burying them and backfilling them with gravel from Dwelley Pit.
134. Dug up and worked sand pickets on top of Windy Pitch Hill and made them passable for vehicle traffic.
135. Hauled surface material from Nesowadnehunk Pit to Katahdin Stream area and spread on the Park tote road.
136. Reviewed trail erosion problems at Grand Pitch on Webster Stream with Chief Ranger.
137. Hauled gravel from Dwelley Pit to Trout Brook Farm to be used as site surface

- material.
138. Pre-cut parts of two toilets for South Branch Pond and constructed them for lean-to areas.
 139. Removed log siding from Matagamom Gatehouse (East Side) and installed sheathing and channel rustic siding.
 140. Fall maintenance – constructed 8'x8' building on Burnt Mountain to be used to house radio repeater.
 141. Hauled pre-cut two-sided log lean-to from Trout Brook Farm to South Branch Pond to be transported by snowmobile to canoe site on Lower South Branch Pond during winter.
 142. Pre-cut two-sided log lean-to at Millinocket and hauled it to Roaring Brook Campground to be transported to Chimney Pond by snowmobile.
 143. Banked crew camp at Trout Brook Farm so that it can be used by volunteers during fall.
 144. Hauled 6"x6"x6' cedar bridge material to Fowler Pond trailhead to be transported to brook location by snowmobile.
 145. Cut, split and stacked firewood for year-round camp facility at Trout Brook Farm.
 146. Serviced heavy equipment including the farm tractor, backhoe and the dumptrucks.
 147. Hauled gravel to the picnic shelter at Blunder Bog trailhead to toilet site.
 148. Placed rocks along South Branch Pond outlet for steps.
 149. Installed a 26' steel pole at crew campsite in SFMA to be used to hold the solar system used for pumping water from drilled well and hooked up solar panels.
 150. Installed 15" culvert in Park tote road approximately 300 yards south of the Nesowadnehunk Field Group Area.
 151. Spread hay in ditches along new road section on Martin Camp Hill.
 152. Started to bush-hog from Nesowadnehunk Field south. (Broken seal on hydraulic motor.)
 153. Removed leaves from culverts during late road maintenance.
 154. Bagged 3000# of cement gravel and hauled to Burnt Mountain trailhead to be transported to radio repeater location during the winter.
 155. Burnt the wood debris at the Telos Service Area.
 156. Monitored installation of propane room heaters at the Abol Field Crew Camp installed by Dead River personnel.
 157. Installed two 15" culverts ¼ mile above north intersection of Katahdin Stream Campground in the Park tote road.
 158. Hauled eight loads bark from Abol Pit to Tea Pond road for fill under gravel to store surface material.
 159. Hauled granite slabs from Nesowadnehunk Pit to Katahdin Stream Campground to be used as steps at sites along the stream.
 160. Placed rocks in washout area near footbridge across Nesowadnehunk Stream at Daicey Pond and covered with Gravel.
 161. Worked in Katahdin Stream Campground making diversion ditches to shed water from road system.
 162. Widened road by Togue Pond gatebooth so as to allow gate personnel to wave people with special passes around gate during times of heavy traffic.

163. Loaded, hauled and placed large rocks in areas at Togue Pond beach.
164. Worked in Abol Field Camp putting finish around doors and windows.
165. Assisted with coverage and operation of Matagamon Gate during the fall season.
166. Placed "No snowmobiling" signs at appropriate locations along the Park tote road and at other areas of access and exit.
167. Removed illegally shot deer from the Murphy Brook road to Trout Brook Farm.
168. Hauled lean-to purlins from the Webster Lake area to South Branch Pond Campground.
169. Hauled bog-bridging material to the Littlefield Pond trailhead and covered to be hauled to site location during the winter.
170. Hauled Russell Pond supplies from Millinocket to South Branch Pond to be hauled by snowmobile during the winter.
171. Hauled lumber to Matagamon Gate from Millinocket to replace log siding on west side of gatehouse with sheathing and channel rustic siding during 2000.
172. Cut, split, hauled and stacked truckload of firewood for Trout Brook Farm workshop.
173. Removed blowdowns from Park tote road from Matagamon to Nesowadnehunk Lake after an early winter ice storm created havoc.
174. Worked updating the South Branch Campground map.
175. Rebuilt two winter tailgates for the new pickup trucks.
176. Hauled bark, peat moss and other supplies to Roaring Brook Campground for temporary storage to be hauled to Chimney Pond during the winter by snowmobile.
177. Hauled propane and lumber for Russell Pond (for inside ceiling and front wall replacement project) to South Branch Pond to be hauled in during the winter.
178. Removed toolbox and fuel tank from vehicle 56 and stored for the winter.
179. Removed furniture and appliances from the buildings at Togue Pond that will be removed during the 2000 year.
180. Started blazing north line boundary doing about ¾ mile in Hay Brook deadwater.
181. Cleaned out polebarn in Millinocket and took some lumber material to Togue Pond to be stored in the polebarn.
182. Serviced snowmobiles and prepared them for winter use.
183. Hauled a load of rough cedar from Millinocket to Woody's Mill in Medway where it was planed, then took it to Trout Brook Farm to be used in picnic tables.
184. Hauled 6" tongue & groove pine from Katahdin Stream garage to Abol Field crew camp to be used for kitchen cabinets.
185. Assisted trying to organize search and rescue coverage to be available over the new year for problems that may arise from mountain climbers.

1999 BAXTER STATE PARK VOLUNTEER PROGRAM

A total of 200 volunteers provided at least 6,213 hours towards the preservation of the resources of Baxter State Park.

Volunteer hours by location are as follows:

Trail Maintenance	-	3,191
Campground Maintenance	-	2,080
Scientific Forest Mgmt Area	-	325
Adm/Maintenance Facilities	-	178
Search and Rescue	-	176
Miscellaneous	-	263

Major volunteer projects in 1999 included:

- Office volunteer assistance was appreciated in the first week of reservations in January
- Opening/Closing of campgrounds at Daicey Pond, Katahdin Stream, Abol, Kidney Pond and So. Branch Pond, Trout Brook Farm and Matagamon Gate.
- Over 120 volunteers donated 3,191 hours on trails throughout Baxter Park.
- Flooring was installed in Cabins #6 and #7 at Kidney Pond.
- Carpentry work to modify Cabin #5 to be more accessible to those with disabilities.
- Reshingling of the Daicey Pond library.
- Mahoosuc Rescue Team, Wilderness Rescue Team and Lincoln Search & Rescue Team assisted in search and rescue operations during the summer months.
- Jacked and leveled ranger cabin at Katahdin Stream.
- The Volunteers for Peace program supplied 2 weeks of volunteer assistance in scraping and painting buildings at McCarty Field and maintenance projects at Kidney Pond.
- The large "headquarters" sign at Park Headquarters was repainted by artist Abbott Meader.

Following is a list of Baxter State Park volunteers who rendered service in 1999:

Mark Andersen	Isabelle Carson	Robert Erickson
Kurt Anderson	Janice Caverly	Donn Fendler
Duffy Akerley	Michael Chell	Scott Fischer
Paul Ste. Amour	Irene Coleman	Dave Flanagan
Bruce Ardia	Huey Coleman	Diane Freelove
Janet Bilodeau	Sam Cronkie	Tom Goetz
Bob Bixler	Jerome Dempsey	John Gould
Stan Butler	Ed Dwyer	Craig Gray
Jim Hall	Terri-Ann Miller	Kristy Trainor
Sam Huston	Wayne Milligan	Jane Thomas

Linda Ives	Aaron Padgen	Latona Torrey
Chuck James	Roger Rand	Kristy Trainor
Katie James	Lori Rand	Eric Trask
Staci Johnston	Zachary Rand	Gary Trask
Kathy Kandziolka	Alan Rees	Roger Trask
Henry Kohn	John Rossignol	Robert Willard
Gretchen Labbe	Wayne Shedd	Judy Wentzell
Paul Labbe	Rachel Ste. Croix	Chaitanya York & Group
Sarah Labbe	Abbie Strout	
Robert Leet	Larry Strout	Lincoln Search & Rescue
Susan Lohnes	Rowena Strout	Wilderness Search & Rescue
Maine Maritime Academy	Jason Sousier	Mahoosuc Search & Rescue
Vanessa Mardones	Frank Taylor	BSA-Troop 618
Jessica Mathews	Dennis Tefft	
Sally Mathews	Brian Tefft	

Trail crew volunteers are listed in the 1999 Trail Report portion of this annual report.

X PROJECTIONS OF MAJOR PROJECTS FOR 2000

1. Renovate disability-friendly facilities (12 toilets and two cabins) to meet ADA standards.
2. Complete Abol Field crew camp for staff use by May 6, 2000.
3. Remove in April snow from Park tote road, Togue Pond to Matagamon Gate, including spur roads to Abol Field, Daicey Pond, Kidney Pond, Nesowadnehunk Field and South Branch Pond.
4. Move radio repeater equipment from Burnt Mt. tower to Burnt Mt. radio building.
5. Haul in rental canoes to Billfish Pond, Center Pond, Middle Fowler and Foss Knowlton Pond.
6. Clear grounds and entrance road for multiple use facility near Rum Brook for Trail Crew.
7. Remove Mountain View, Hidden Camp and Forestry Camp from Togue Pond.
8. Replace old cribbing at Daicey Pond parking lot.
9. Replace lean-to at Chimney Pond.
10. Construct replacement lean-to at South Branch Pond.
11. Roadside mowing of 15 miles of Park tote road.
12. Replace siding, windows of Matagamon Gatehouse.
13. Replace siding and windows on south wall of CRI cabin at Russell Pond.
14. Remove old steel tower on Double Top Mt.
15. Remove old crossing culverts (2) on Nesowadnehunk Stream on the discontinued Park road.
16. Remove old crossing culverts (2) on North Branch of Trout Brook near the former Telos gatehouse.
17. Reshingle CRI cabin at Roaring Brook.
18. Modification/renovation of South Branch Pond workshop.

C. Scientific
*F*orest
*M*anagement
*A*rea



SFMA Advisors during 1999 fall field tour. From left: Dick and Margie Dearborn (Director's Research Committee), Joe Wiley, Jensen Bissell, Alison Dibble, Roy Farnsworth, Barbara Brusila and daughter Leah, Philip Ahrens, and John Mills.

Forest Management

Overview

The last (or the next-to-last, depending on your point-of-view) year of the 20th century proved to be a “normal” year for the SFMA. The themes articulated in the 1998 management plan were applied in our day-to-day operations.

We continued to apply the maximum affordable effort toward releasing softwood stands overtopped by declining fire-origin intolerant aspen/birch types. Some excellent work was accomplished in this regard in stands on the Rhodora Road, Wadleigh Mountain Road and winter harvests on the Wadleigh Bog Road. 1999 produced a record for aspen harvest in the SFMA at 13.8 million pounds. 1999 was also the first year that total hardwood harvest volume exceeded softwood harvest volume (51% hardwood, 49% softwood). By forest type, the SFMA is strongly softwood oriented and the hardwood volume harvested reflects a purposeful effort to aggressively release developing tolerant softwood stands from intolerant aspen/birch overstories resulting from forest fires in the first ¼ of the century. These aspen overstories are now reaching pathological maturity and our intent is to encourage the further growth of the developing softwood stands beneath them by strong partial harvests of the aspen overstory. The lower relative value of aspen versus spruce and fir makes this harvest somewhat of an investment in the future. Market price levels in 1999 were relatively good and consequently, a 51/49 hardwood/softwood mix was affordable from a budget standpoint. It is doubtful that we could push the hardwood percentage much higher. See the Forest Management section and the attached block harvest summary and wood products harvest summary sheets for more information.

Pelletier Brothers, Inc., led by Eldon Pelletier, President, continued to provide reliable top-notch service as principal contractor for SFMA harvest and road construction operations. During the summer of 1999, we tested an eight-wheeled (versus our “normal” six-wheeled) Rottne forwarder on SFMA stands in compartment 11. A loaded forwarder can easily weigh over 10 tons and the movement of the forwarder back and forth over woods trails presents the greatest potential for harm to the forest soils. The additional 2 wheels can lower site impacts by lowering the overall ground pressure of the loaded forwarder and increasing the stability and smoothness of the machine’s travel over the ground surface. These positives must be weighed against the higher cost of an eight-wheeled versus a six-wheeled forwarder. Our testing gave us the opportunity to evaluate these qualities and as a result, we negotiated a change in our service cost sufficient to replace our six-wheeled forwarder with an eight-wheeled forwarder for the majority of SFMA harvesting work.



(Rottne eight-wheeled forwarder)

The production and versatility of our harvesting operations was reduced by the loss of Reno Sylvain and the chainsaw/forwarder work he could accomplish in mixedwood and special concern stands. Reno purchased a complete single-grip processor set and went to work for Plum Creek in the Jackman area. Our search for a replacement system to work in more hardwood dominated stands led us to Bob Matthews of Houlton. Bob has a mini-skidder with a radio controlled winch and has long expressed an interest in working in the Park. As the year closed we are optimistic that the details for some trial work in 2000 can be ironed out. Not having a more flexible alternative to the single grip forced us to bypass some stands that we would ordinarily have thinned lightly in mixed diameter classes.

As suggested in our management plan, we continued our efforts developing and instituting protocols for the measurement and monitoring of forest resources. We installed 13 recording temperature probes in the SFMA as a start in developing baseline data on water and air temperatures in a variety of forest stands and stream profiles. The resulting data, even from only one year, was both interesting and surprising and we are learning some things about the volatility of our 2nd order SFMA streams. Our sampling for terrestrial amphibians began in 1999 after the installation of sampling 4 cover object arrays in 1998. We plan to expand the arrays from 4 to 8 in 2000 and increase the variety of habitats sampled.

Operationally, the latter half of 1999 was dominated by a major effort to relocate SFMA crew housing from the Coffeelos Camps site on Bureau of Parks & Lands to an SFMA site at the end of the Hemlock Road about ¾ mile from the SFMA south entrance. This relocation was an extensive undertaking made possible only by the combined efforts of Park administration and staff, Pelletier Bros., Inc. and numerous SFMA volunteers. Preparation continued through the summer (clear and grade site, drill well, install septic lines and tank, leach field, etc.) and by September 23rd, the heavy lifting began and the camps were moved. By October 5th, the camps were livable and all systems were up and running. Details were completed around the 1st of December. Completion of this project will include the construction of a new camp in 2000.

From a management standpoint, 1999 was dominated by the effort to achieve Forest Stewardship Council (FSC) Forest Certification. The decision to enter the certification process was cemented at the April 1999 SFMA Advisors meeting and at the time of this writing in March 2000, the process is nearing completion with certification expected in April or early May. The management issues addressed in the assessment and resulting certification will have lasting, and I believe very positive, effects on the future of the SFMA.

SFMA Advisory Committee

The SFMA Advisory Committee continues to provide invaluable insight and council in the important big and little picture issues that confront the evolution of the SFMA in accordance with Percival Baxter's designs. In 1999, the SFMA Advisors functioned as a 10-person group and we are actively looking for recruits to fill the two existing vacancies. The SFMA Advisors met three times in 1999. The annual spring operational review was held on April 27 at the US Government Building in Stillwater. Operational data for 1998 was reviewed and discussed. The committee actively discussed the option of pursuing third party certification and ultimately unanimously recommended that providers for FSC Certification be approached and efforts to secure certification begin. The Advisors met again on September 22/23 for the annual SFMA fall field tour. The Advisors were joined in the tour by a few members of the Directors Research Committee and most of the elements discussed in the overview above were field checked during the tour including visiting temperature probe site and cover object arrays as well as active harvest areas. The DRC wished to view the SFMA to help in consideration of any differences between research protocols for SFMA areas versus the sanctuary portion of the Park. The SFMA Advisors gathered in Augusta on December 17th for the final meeting of 1999 to review the draft SFMA certification assessment report produced by the Smartwood Certification Assessment Team. Baxter State Park Authority member and Maine Forest Service Director Tom Doak attended this meeting.



Signs of forest succession on block 10015

SFMA ADA inspection

The SFMA was toured on September 23 by Park Staff Bissell and Caverly as escorts to National Park Service consultant Jack Andre. This was part of a longer visit to the Park by Mr. Andre in an effort to evaluate the Park's needs regarding facilities and support of the *Americans with Disabilities Act* (ADA). Regarding the SFMA, our campsites and trails are all backcountry and require no modifications to comply with ADA. Our forest management roads are mostly open to public access and are also compliant. Areas that require some modification are our picnic shelters at Halfway Brook (smooth/level floor and access) and Blunder Bog (smooth access trail construction w/ 1/12 grade, smooth/level floor). In addition to the picnic shelters, both vault toilets accompanying the shelters will require some modifications to entries, support bars and access pathways. All of the ADA work required in the SFMA is planned to be completed by the end of 2000.



The SFMA's Blunder Pond Shelter is scheduled for ADA access work in 2000

Forest Stewardship Council Certification

"Given the well-developed state of environmental law in the US, some question the need and relevance of additional standards and certification programs. Critics of these standards programs argue that compliance with existing laws provides near-certification quality to most forest operations in the US and therefore makes standard-setting and certification to those standards unnecessary and burdensome to the landowner. The other school of thought is that such voluntary, market-based standards and verification programs offer the forestry community the opportunity to police itself, demonstrate concern for the environment to the public and consumers, continually improve forest practices, and possibly avoid more burdensome and costly regulation."

The Society of American Foresters Task Force on Forest Management Certification Programs, 1999 Report.

The SFMA can be placed firmly in "The other school of thought." For some years now, the concept of third party certification of forest management based on accepted standards has been gaining momentum in the US. The recent development of accepted standards for the northeastern region improved the effective application of an assessment as an effective tool to improve management. After the unanimous recommendation in April of the SFMA Advisors to pursue certification, SFMA staff worked with both FSC accredited certifiers in the Northeast, Smartwood and Scientific Certification Systems (SCS) to select a certifier best suited for the SFMA. After consideration of a number of factors, Smartwood was chosen as a certifier and Baxter State Park committed to the certification process. Although often billed as a tool to gain market advantage, for the SFMA, certification is valuable more as a tool to publicly certify "exemplary" forestry as the Trust Deeds direct, and as a process for long-term improvement of management

through on-going third party review, assessment and management change. Our changes, often regarding what we *think* as much as what we *do*, began the moment we committed to the certification process. Smartwood's assessment team consisting of team leader and forester Alan Calfee, forester Ross Morgan, ecologist Janet McMahon and National Wildlife Federation/Smartwood Coordinator Stacy Brown arrived on October 25th to begin the week long management assessment which concluded in the early afternoon of the 29th. In November, the assessment team submitted a 32-page draft assessment report including a general summary, a description of the assessment process, results, conclusions and recommendations, certification score and findings and a conclusion. The draft report was thoroughly reviewed by SFMA and Park staff and the SFMA Advisory and corrections of fact and comments on content were submitted back to the assessment team prior to consideration prior to peer review of the report. At the time of this writing, the report is nearing completion of peer review with a completion of the process and the issuing of the certificate anticipated in May or June. For the SFMA staff, certification is what we will remember about 1999.

"The purpose of the SmartWood Forest Certification program is to provide market recognition for good forest management through credible, independent verification of forestry practices"

NWF/SmartWood Forest Management Certification Proposal for Baxter State Park
Scientific Forest Management Area, July 3, 1999

Forest Operations

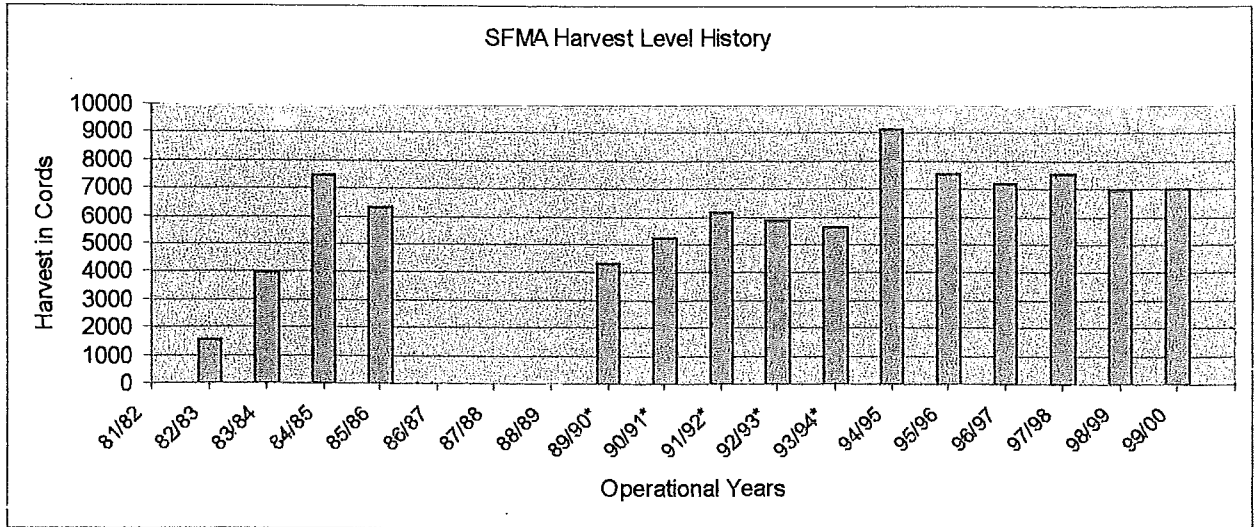
Harvesting and Marketing

The 1999/2000 operating season ushered in some important changes for SFMA markets as 1,000,000 acres of Bowater land changed hands in a sale to J.D. Irving, Ltd. Chuck Gadzik, Director of the Maine Forest Service, chair of the BSPA, left to take a position as forest manager for Irving's new Maine holdings. For several years in the late 1980's and early '90's, Chuck was the chair of the SFMA Advisory. It's a small world, especially in Maine.

The change to Irving brought new competition to our markets and changes in our transportation agreements (when we haul wood on private roads, we enter into agreements with the owners of the roads regarding use, maintenance and payments). The loss of our chainsaw/forwarder system also resulted in some reduction in the variety of sites we worked in (see overview), but we are hopeful that we can improve on our options in 2000.

We continued our focus on releasing emerging spruce/fir/pine stocking from overtopping intolerant aspen on our old burn type.

Our overall harvest volume in 1999 was about 34 million pounds or slightly over 7000 cord equivalents. Our target harvest volume is about 8000 cord equivalents. As stated in the overview, 1999 was unusual in that it marks the first year that SFMA hardwood harvest exceeded softwood harvest. Our average removal per acre was slightly over 8 cords/acre with our average stocking prior to harvest about 32 cords/acre. Our average block size (18 blocks harvested) in 1999 was 47.6 acres. Our net revenue before road tolls (approx. \$30,000) and personnel costs (approx. \$100,000) was \$ 218,546.21. See the attached Block Harvest Summary and Wood Products Harvest Summary for more information.



Mike Irish at work in the Rottne single-grip – block 1035, Wadleigh Bog Road

Our harvesting was accomplished completely by Rottne single-grips. Although we had a very early spring, it was June 1st before harvesting equipment arrived and work began. Wet soil conditions produced a few minor interruptions in work in November and early December, primarily for the forwarder. With only a solitary processor working most of the year, we knew by November our pace would result in a total production for the year significantly under our target harvest level. Consequently, we added a single-grip for the winter season. This would bring us closer to our target level of harvest and allow us to complete our work on the Wadleigh Bog Road so we would not have to open the road next season for only a few acres of work before moving on.

Other than the entry of Irving into our area as a softwood log buyer, markets for our products were relatively unchanged from 1998/99. Most of the cedar harvested on the SFMA was hauled to McLaughlin's Mill in Medway and sawed into lumber, boards, planks and bog-bridging material for use within the Park.

<u>1999/2000 Woods Personnel:</u>	
<u>Pelletier Brothers Forest Products Inc., SFMA Contractor:</u>	
<ul style="list-style-type: none"> • <i>Eldon Pelletier, President</i> • <i>Rudy Pelletier, Vice-President</i> • <i>Gerald Pelletier, Secretary-Treasurer</i> • <i>Reginald Beaulieu, Controller</i> 	
<u>Rottne Cut-to-Length Harvester:</u> <i>Mike Irish</i> <i>Greg Charette</i> <u>Road Construction:</u> <i>Brian Boutilier</i> <i>Reed Dionne</i>	<u>Rottne Forwarder:</u> <i>Dean Schlaunwhite</i> <u>Trucking:</u> <i>Brian Nutting</i> <i>Steve Gilman</i>

1999 marked the 10th anniversary of Licensed Professional Forester John Mills' work in marking and cruising of SFMA forest stands. John's ability to apply to guide the intensity and orientation of harvest by accurately expressing the silvicultural prescription through his marking has made him a valuable component in SFMA ops. He's also been great to work with every day he's been on the job. At the fall field tour, SFMA staff and advisors presented John with a token of our appreciation for a job well done (a matted and framed 1940's era photo of Grand Pitch on Webster Stream).



Jensen Bissell (l) and Joe Wiley (r), help John Mills celebrate 10 years' work in the SFMA

Road Construction and Maintenance

Spring arrived exceptionally early in 1999 and SFMA staff was able to complete the roadside seeding of 1998 construction on April 28. About 200 red pine were planted at various spots along SFMA roads in the fall of 1999.

Road construction included 3.4 miles of all-season road and 0.8 miles of winter road in the 1999/2000 season. The winter roadwork was confined to the Wadleigh Bog Road and the 99/00 winter harvest work on this system completes our efforts there for the next 20 years. Road construction is well distributed across the forest to ensure that our management doesn't occur in spatial groups denoted by year (see appendix for map of SFMA 1999 road construction).

Summary of 1999 Road Construction and Maintenance Projects:

<u>Project</u>	<u>Length (feet)</u>
Wadleigh Mountain Road Ext.	3,390
Frost Pond Road	7,728
Red Back Road	1,440
Hinckley Brook Road	5,400
<u>Wadleigh Bog Road (winter)</u>	<u>4,283</u>
Total Road Construction	22,241 (4.21 miles)



Indian Carry Road in November

In addition to forest road construction, surfacing was applied to about 1.5 miles of road from the south entrance up to the new campyard on the Hemlock Road. The surfacing was purchased from GNP – reasonable surfacing is getting to be relatively hard to find on the SFMA and this will likely be a perennial problem in years to come. SFMA staff all contributed to mowing about 5 miles of SFMA roadside. Several of the circa 1982-3 spur roads were cleared with the mower and then graded to re-establish a road surface. Routine grading (26 machine hours) was also scheduled and completed. Currently, there are about 13 miles of winter and 56 miles of all-season for a total of 69 miles of forest management road in the SFMA.

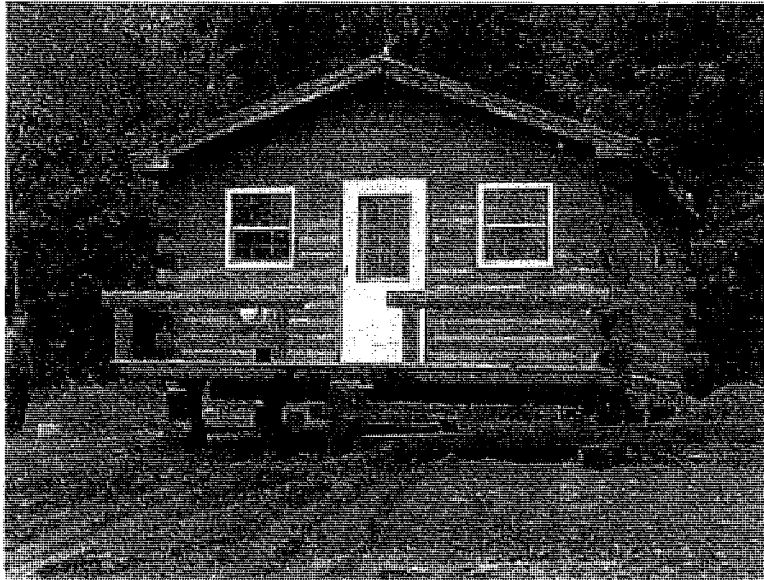
Crew Camp Relocation

Along with certification, 1999 will be remembered as the “year we moved the camps”. The original location of the SFMA camps, about 1 mile north of Chamberlain Bridge, just off the Telos Road on a former GNP logging camp site, had some positive aspects and the decision to move them to the new location was arrived at only after several years of consideration. At Coffeelos, the access was good to a main haul road and the camps were handy to the north side of the SFMA, however, the camps were a long way from the south side of the SFMA where 2/3 of the management activities will take place. Unlike almost any other Park facility, the camps weren’t on Park land and were a long way from the most direct Park access – the Black Brook Service Road. In addition to distance concerns, the camps were a part of an expanding community of IF&W and BP&L workers housing that developed over time at the Coffeelos site. There is only so much pressure resources can bear, so it seemed that it would help the situation if we moved off-site. With the Park Director encouraging the move, plans were made to effect the move in the fall of 1999. After some comparison shopping, a site was selected at a circa 1983

logging landing less than a mile from the south entrance of the SFMA. This provided good access to areas south of Webster Lake/Stream and made the drive around to the north side of the SFMA as short as possible. Plowing would also be kept to a minimum regardless of where winter work was progressing.

The area was cleared in May of 1999 and in June SFMA Advisor and soil scientist Roy Farnsworth conducted a site exam to determine suitability, placement and design of the septic system. In July a 320' well was drilled by Hanscom and Sons of Orrington, Maine. In August, the camp locations were laid out and the leach field, septic tank, sewer and water lines were installed under the direction of Park Ranger Barry MacArthur and with the assistance of SFMA volunteer Jim Hamlin. In early September, SFMA volunteers Tom Goetz and Frank Trautmann built a new pumphouse. In late September, the two 16'x20' log camps, a storage shed and a generator shed were jacked up, loaded and moved to their present location by Pelletier Bros., Inc. Eldon Pelletier provided the manpower and equipment necessary to move the camps without charge to the Park in consideration of the improved location and production his crews would capture at the new camp location.

One camp was left in place at Coffeelos as it was judged that it would not survive the move. In early October, Park Ranger Bob Howes and electrician Kent Ladd re-installed the solar power system at the new location and by October 5th all major systems were up and running. Completion of a number of loose ends took the remainder of the fall. One additional camp (18'x22') is scheduled to be constructed on-site in 2000. At the time of this writing, the materials for this camp are on-site and assembly is scheduled for April/May by Fred Herring Builders of Millinocket. A steel gate was also purchased and will be installed at the mouth of the 1000' access road in May of 2000.



SFMA Crew Camp ready for setting.

SFMA Volunteers

- **Volunteer work**

1999 SFMA's volunteer program continued its reputation of being a rewarding and productive experience for all those involved. This year we had eight dedicated volunteers who contributed over 564 hours of work in many areas of the SFMA. Special thanks to all the volunteers who helped in the major site preparation and clean up of our new crew camp facility in the south end of the SFMA. Projects such as: the new pump house, septic system, winterizing the camps, and clean-up of the old site are to mention just a few of the jobs accomplished by the volunteers which helped make the move a successful and positive experience for all. Other projects included new bunkbeds at McCarty Field, lean-to preparation at the Webster Lake outlet site, trail work, and other forestry related jobs.

1999 Webster Lake Volunteers:

<u>NAMES</u>	<u>HOURS</u>
Tom Goetz	100
Frank Troutman	100
Paul & Joanne Woodward	144
Padre Chalout	80
Jim Hamlin	40
John & Susan Loyd	40
Bob Bixler, Mark Anderson, and Stan Butler	60
TOTAL 564	

Resource Monitoring

"As revenues develop through the planning period, strong consideration should be given to the investment of regular expenditures toward a more complete monitoring effort of forest resources. 1998 SFMA Forest Management Plan, pg 59.

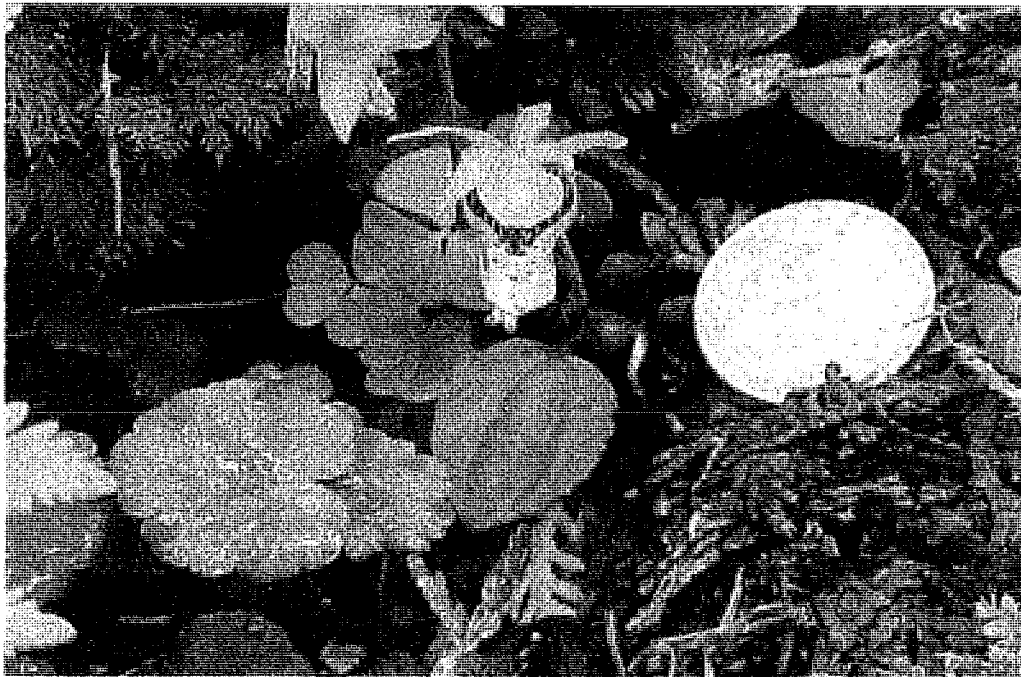
- **Continuous Forest Inventory Plots**

Barbara Brusila of Mid-Maine Forestry and consulting forester Joachim Maier returned in the spring (May 10-14) and fall (September 5-8) of 1999 to install another 26 CFI plots south of Webster Stream. This leaves about 24 plots remaining to be installed in 2000 to complete the installation of the 114-plot set. The installation of the final plots in 2000 will complete an effort that began in 1996. This four year band of time makes setting the date of the first remeasurement a tough call, but we'll probably split the difference and remeasure in 2008, and then regularly every 10 years thereafter.

A complete work-up of the CFI data is planned once the final 24 plots have been installed.

- **Rare Plant Survey**

Led by Park Naturalist Jean Hoekwater, a daylong survey was conducted checking suitable habitats for Calypso Orchid (*Calypso bulbosa*) in compartments 7 and 8. Calypso hunters included resource manager Jensen Bissell, naturalist asst. Meg Ounsworth, and forestry aide Jason Cooke. The survey was somewhat late in the flowering season. Thanks to Jason's sharp eyes, our survey confirmed that Calypso orchid does exist in the SFMA. More survey work is anticipated for 2000.

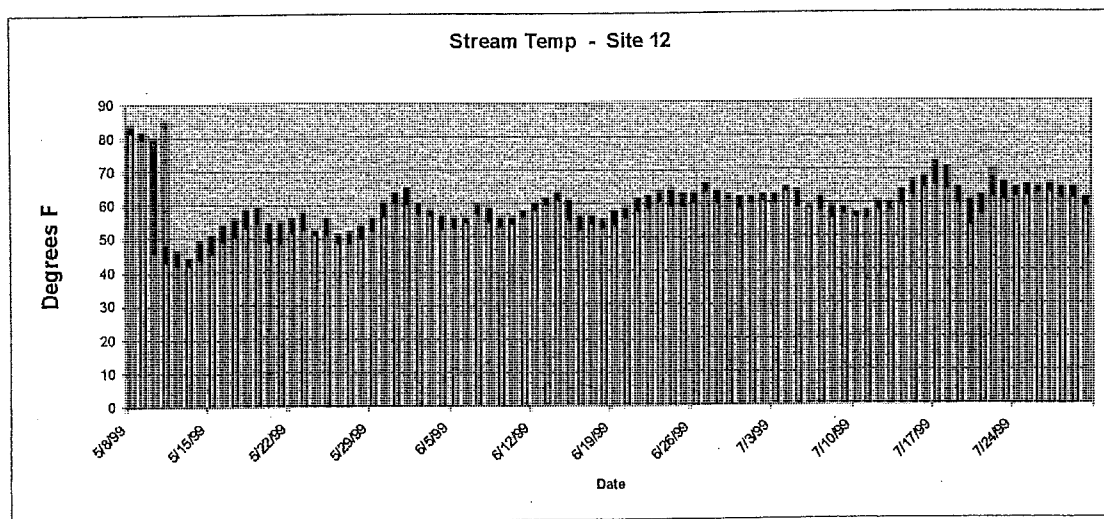


SFMA Calypso Orchid

- **Temperature Probes**

One of the easiest resource parameters to measure is temperature. Temperature, especially seasonal high temperatures and duration of temperatures above 75 degrees Fahrenheit, is an important indication of the quality of water as habitat for brook trout. In the spring of 1999, we purchased 12 recording, submersible temperature probes. These devices are relatively inexpensive and can be preset to record a temperature reading at a variety of regular intervals such as every minute, or every hour, or once a day, etc. The

probes will retain the information of each measurement and the information can be downloaded to a laptop in the field. We placed 8 of the probes in a variety of sizes of streams within the SFMA, from smaller 2nd order brooks up to Webster Stream. We tried to place the probes in streams that had a variety of upstream structures, including both harvested and unharvested sites. We also placed 4 probes in various forested stands to measure air temperatures. After a miscue that maxed out the data memories in early July, we've placed the air probes out for a winter of measurements and will set out the water probes in early May to capture the May to November temperature data. We used data and experience from a similar trial set up by Manomet's Shifting Mosaic Project. As with Manomet's work, the volatility of our stream flows was demonstrated on two occasions when a probe was temporarily lost downstream after a sudden freshet. We recovered both probes and will make some adjustments in our y2k placements. See the appendix for a map of probe locations.



Temperature of a 2nd order tributary of Hudson Pond from May into July, 1999. The first four bars represent the temperature of the back of a Park pick-up on the way to the placement site.

- **Terrestrial Amphibians**

In late 1998, we set out four cover object arrays (COA) to sample presence/absence and surface density of terrestrial amphibians. The COA's are set in different stand types and we plan to set out 2 to 4 more arrays in 2000. (See attached datasheet)

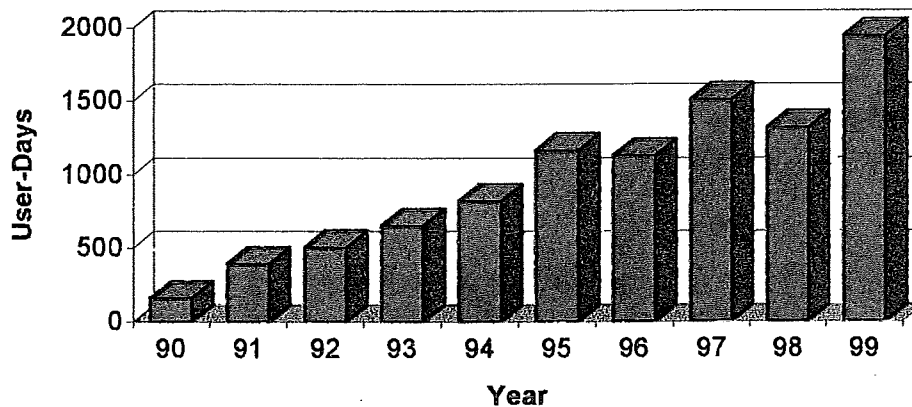


Spotted Salamander found under cover object

- **Recreational Use**

Once again, recreational use passing into the Park via the two SFMA self-registration boxes is higher than last year. As can be noted in the chart below, recreational use within the SFMA, primarily hunting, has been increasing steadily over the past 10 years. On busier days, hunters occasionally comment on the number of other hunters in the area, but it hasn't seemed to depress the actual use levels. No major incidents occurred during hunting season, one summons was issued by Park staff (IF&W activity is unknown) for illegal taking of deer.

SFMA Self Registration



**SFMA ENTRANCE TALLIES
LEVELS BY TYPE - 1999**

USE TYPE	GATE COUNT	% of Total TOTAL
Forestry	44	2.2%
Hunting	1838	93.0%
Fishing	13	0.7%
Trapping	13	0.7%
Hiking	26	1.3%
Sightseeing	42	2.1%
Research	0	0.0%
	1976	100.0%

Recreation Management

For a number of years it has been apparent to SFMA staff that use levels on the Ice Wagon and Boathouse sites have been very low. The numbers were already low prior to the closing of the Webster Lake Trail and the opening of the Wadleigh Brook Trail and the Hudson Pond lean-to, all changes that offered hikers a more attractive option at Hudson and routed some traffic away from Webster Lake. Late in the fall of 1998, the Park Director approved a request from the Resource Manager to close these two sites and relocate the new lean-to (a circa '95 Frank Trautmann pre-fab) from the Boathouse site to the Webster Outlet site. A lean-to at the Webster Outlet site would allow a party to canoe the corridor without a tent, depending upon the Webster Outlet and Little East lean-tos for cover. In February of 1999, the lean-to was moved across the ice of Webster Lake from the Boathouse site to the Webster Outlet site by Park staff Bissell, Browning, MacArthur, Kenney and Goode. Just prior to Park opening in May, SFMA volunteer Tom Goetz leveled the lean-to on its new site.

In keeping with many of the Park's outlying sites near water, a canoe was moved into the Hudson Pond lean-to site for use by campers in the 1999 season.

Education/Public Relations

SFMA Forest Tours

Lincoln Regional Vocational Education

The Forestry students from Lincoln Regional visited the SFMA for two days, staying at McCurdy Field June 3. The students spent one day on a volunteer work project building a small crossing and some bog bridging on a tour trail in block 6026 and on June 4th they toured the SFMA with forest technician Mac Browning.

Northeast Forest Ecology Workshop

The SFMA provided one of numerous alternative tours offered as a part of the 3-day 2nd International Northeast Forest Ecology Network Conference held in Orono. On June 29, SFMA staff led a van of scientists and foresters through the SFMA for an overview of SFMA management and operations.

Forest Ecology Network

Originally billed at 14, the actual tourees counted Jonathan Carter plus two on this August 14th SFMA tour. We toured the SFMA operations and discussed forest management until the early afternoon.

Maine Forest Service Forest Policy & Management Division

Led by Don Mansius, this larger group participated in a tour of SFMA operations and a fairly intensive discussion of SFMA Management. Maine Forest Service Director and BSPA member Tom Doak attended this tour.

Speaking engagements

On May 6th, SFMA resource manager provided a talk on the low-impact aspects of SFMA forest operations as a part of a conference on Low Impact Forestry sponsored by the University of Maine at Presque Isle.

The resource manager presented a forestry exercise during the Millinocket Middle School's annual field day at the Middle School's outing club site on Lower Togue Pond. This has become an annual rite of spring and an enjoyable way to get in contact with a sample of the areas young people.

The resource manager traveled to Caribou to provide an evening talk on Baxter State Park to the Caribou Masonic Lodge.

The resource manager also participated in the SAF poster contest by presenting a talk on forestry in Maine to three classes of sixth graders in Penquis Valley Middle School in Milo. One of the posters produced by the students won at the Piscataquis County judging level, earning the sixth grade student a \$50.00 savings bond.

The forest technician provided an evening talk on forestry and the SFMA at Kidney Pond Campground on July 28.

Training Attended

- New England Council of Forest Engineers (NERCOFE) annual conference in Orono, Bissell/Browning, 3/1.
- Incident Command System training, Mac Browning, 3/19
- Holt Forest Workshop, Arrowsic, Jensen Bissell, 4/10
- Forest Steward's Guild Meeting, Gardiner, MA., 4/13-14, Browning/Bissell
- SOLO Training, Backcountry 1st responder, 6/3-4, Jensen Bissell
- Attended a Performance Budgeting session in Augusta, 7/14, Bissell/Johnston
- As a stakeholder, attended Manomet's Shifting Mosaic Field Tour in Stratton, 7/25, Jensen Bissell
- MESAF Conference – Thinning in the Maine Forest, 11/15-16, Augusta, Browning/Bissell
- Forest Steward's Guild Meeting, Ron Lockes' Farm, 10/20, Sebec, Jensen Bissell
- Received training in Forklift safety and operation, Park HQ, 11/24, Bissell/Browning

- **Research**

No active research activities took place in 1999.

Other Activities

Austin Cary Lot

The Austin Cary Lot Committee (Joe Wiley, John Loyd, Barrie Brusila, Jensen Bissell) met on April 12 in Brunswick to discuss plans for the 1999 year. Rob Bryan and Bob Waddle also attended part of the meeting to provide suggestions on additional community involvement. Final plans were discussed regarding a limited harvest west of the causeway and the harvest areas (compartment 2 – white pine stands) were marked by Barrie Brusila during the early summer. On August 13, Barrie Brusila and Jensen Bissell installed two simple permanent measure plots in stands near the school. These plots will provide an opportunity for the students to measure change in forest stands. Another outgrowth of the April meeting was an open-house tour of the ACL. This was advertised locally for Saturday, July 31, but disappointingly, (Bissell, Brusila, Loyd, Wiley) no one attended except Rob Bryan who was scheduled as a resident expert on wetlands. Later in the fall, Barrie Brusila worked to complete a harvesting agreement with a local logger and communicate possible operations to adjacent landowners. The subsequent warm and somewhat snow-free winter never provided adequate cover for winter harvesting and plans were tabled in February. Based on an extending pattern of warm winters in this area, summer harvesting may be considered for these stands.

Investment/Finance Committee

Jensen Bissell attended the annual Boston Trust Fund Review meeting in Boston on 2/18 with the Park Director and several BSP Advisors. Bissell and Johnston attended the State-Held Trust Review meeting in Augusta on July 16 and the Investment sub-committee meeting in Portland on August 18th.



SFMA Crew Camps at the Hemlock Road location in February, 1999

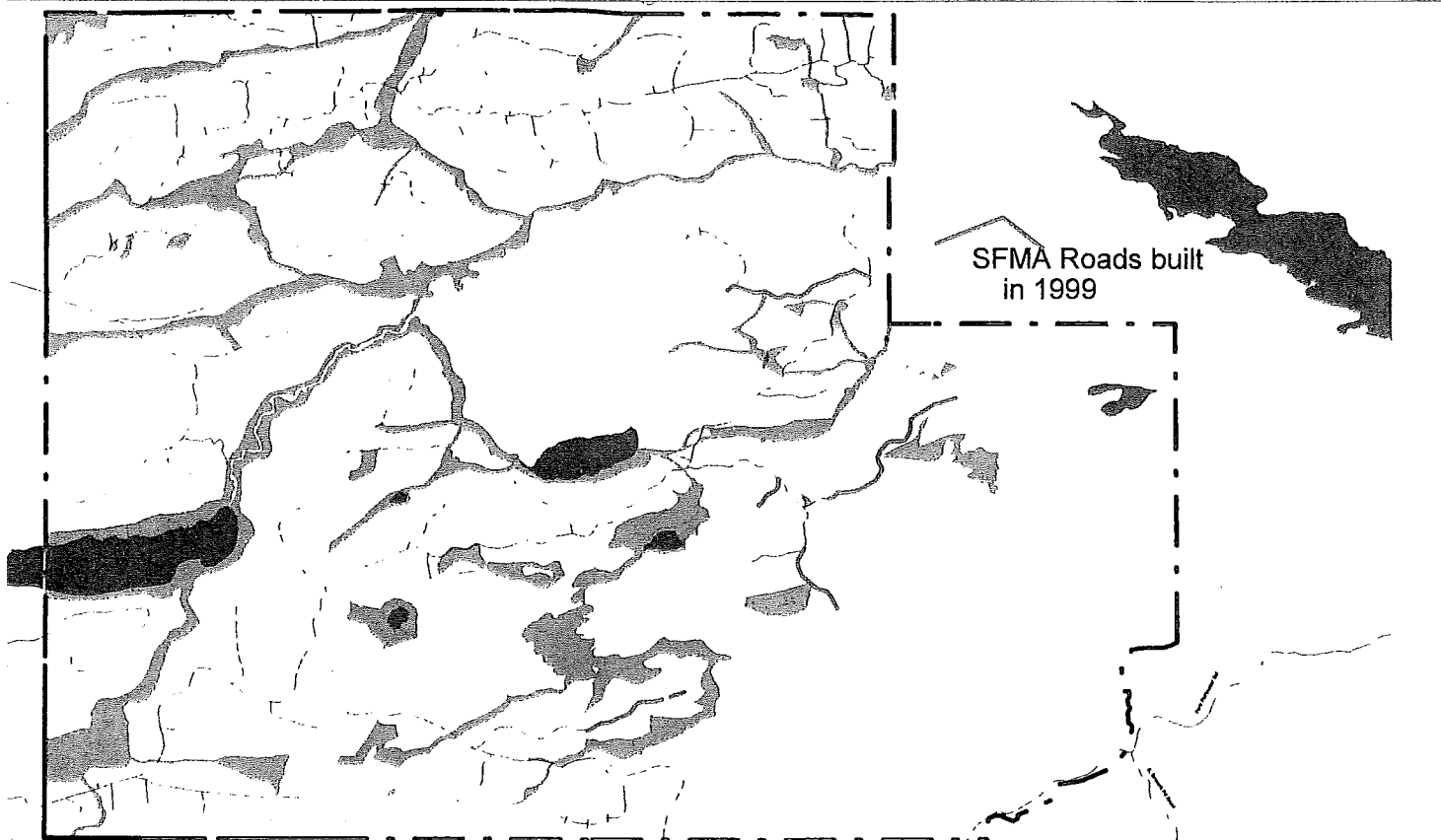
(b) (5) DPP, (b) (7)(C), (b) (7)(D)
(blkprd00.xls)

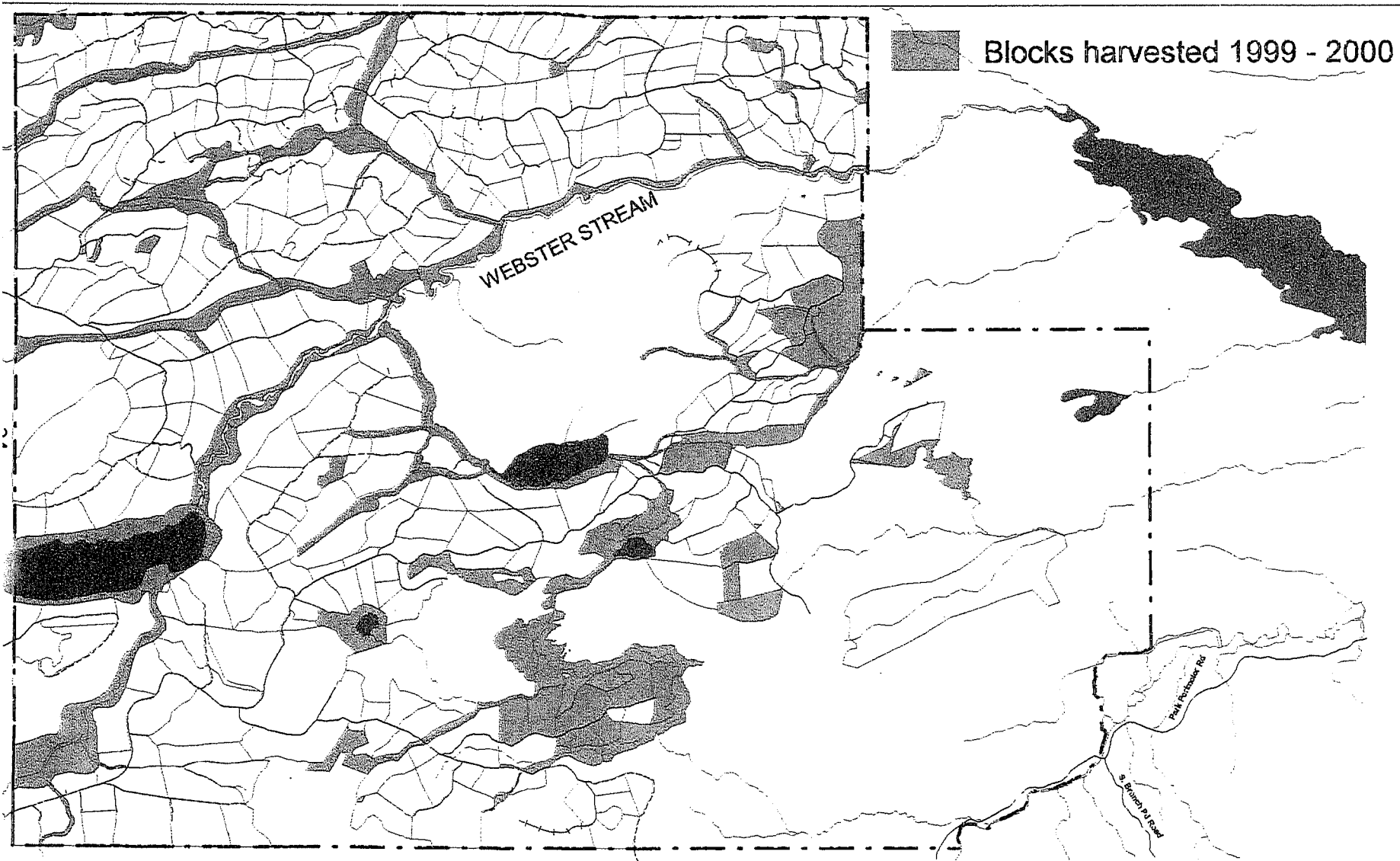
Wood Products Harvest Summary, FY 2000
All Production (single grip only)

PRODUCT	VOLUME IN M-LBS	%GRP %TOT	GROSS REVENUE (\$)	%GRP %TOT	SERVICE COSTS (\$)	%GRP %TOT	NET REVENUE (\$)	%GRP %TOT
Hemlock Sawlogs	120.691	1%	1,936.50	0%	1,878.38	1%	58.12	0%
Pine Sawlogs	354.617	2%	14,166.94	3%	5,808.07	2%	8,358.87	3%
Spruce/Fir Sawlogs	17,352.760	97%	537,387.81	97%	284,936.65	97%	252,451.16	97%
Cedar Sawlogs*	41.650	0%	928.17	0%	682.23	0%	245.94	0%
TOTAL SFTWD LOGS	17,869.718	48%	554,419.42	66%	293,305.33	47%	261,114.09	119%
Spruce/Fir Studwood	0.000		0.00		0.00		0.00	
TOTAL STUDWOOD	0.000	0%	0.00	0%	0.00	0%	0.00	0%
Pine Pulpwood	284.580	60%	4,008.530	66%	4,674.930	60%	-666.40	40%
Hemlock Pulpwood	186.840	40%	2,055.240	34%	3,055.700	40%	-1,000.46	60%
TOTAL SFTWD PULPWOOD	471.420	1%	6,063.77	1%	7,730.63	1%	-1,666.86	-1%
TOTAL SFTWD PRODUCTS	18,341.138	49%	560,483.19	67%	301,035.96	49%	259,447.23	119%
Hardwood Sawlogs	636.928	90%	14,853.960	86%	10,419.240	90%	4,434.72	79%
Hardwood Veneer	71.047	10%	2,326.360	14%	1,162.660	10%	1,163.70	21%
TOTAL HRDWD LOGS	707.975	2%	17,180.32	2%	11,581.90	2%	5,598.42	3%
Aspen Pulpwood	13,876.820	75%	201,708.840	78%	228,761.870	75%	-27,053.03	1%
Mixed Hardwood Pulpwood*	4,685.670	25%	57,666.190	22%	77,112.600	25%	-19,446.41	0%
TOTAL HRDWD PULPWOOD	18,562.490	49%	259,375.03	31%	305,874.47	49%	-46,499.44	-21%
TOTAL HRDWD PRODUCTS	19,270.465	51%	276,555.35	33%	317,456.37	51%	-40,901.02	-19%
TOTAL SINGLE-GRIP	37,611.603		\$837,038.54		\$618,492.33		\$218,546.21	
REVENUE PER M-LBS			\$22.25		\$16.44		\$5.81	

* Does not include 161.85 Mlbs of Cedar logs and 98.35 Mlbs of firewood processed for use in Baxter State Park

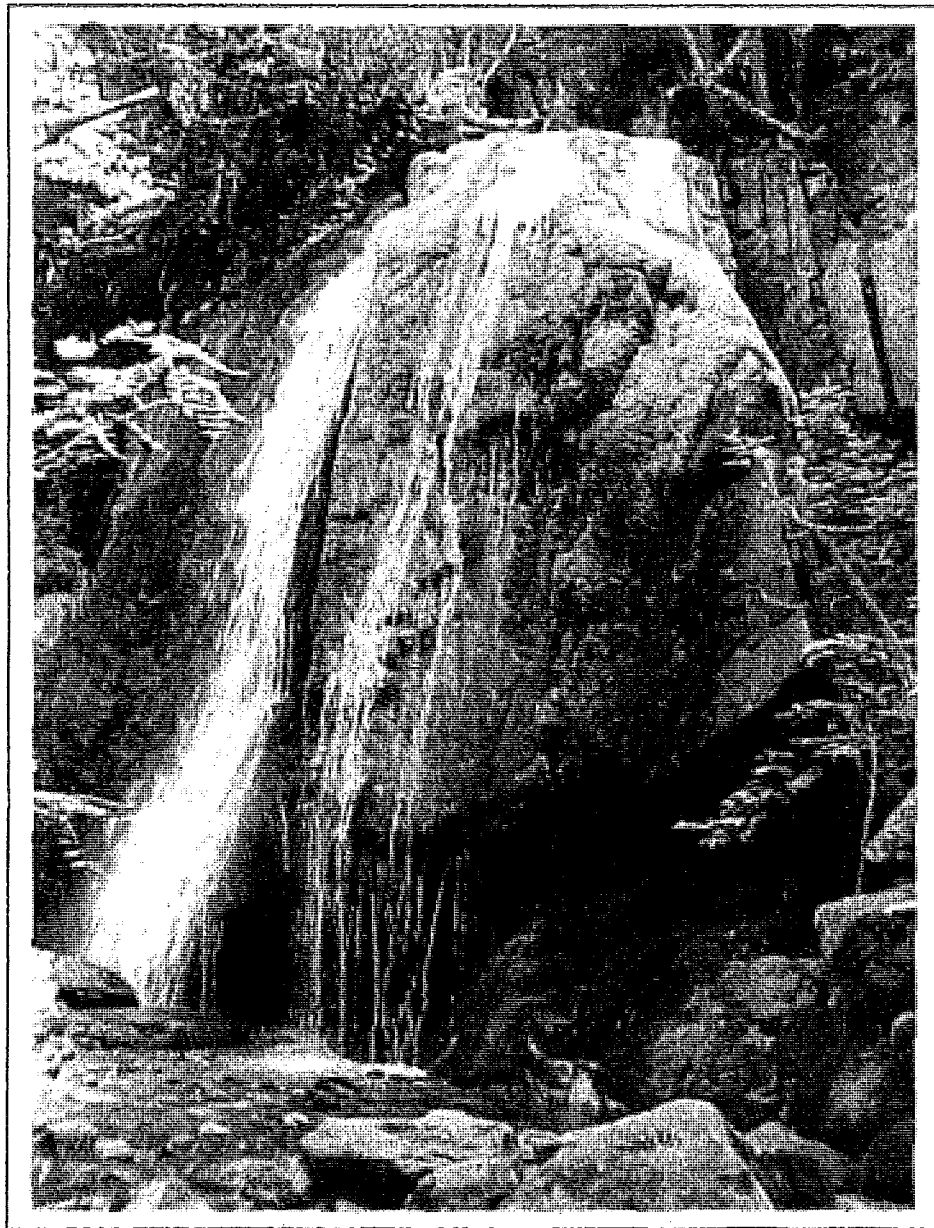
Note: figures do not include road toll costs





D. 1999 INFORMATION/ EDUCATION

**Jean Hoekwater, Naturalist
Meg Ounsworth, Naturalist Assistant
Tim Scurso, SCA Research Assistant**



Lower Green Falls

1999 ANNUAL REPORT
INFORMATION/EDUCATION

PUBLIC PROGRAMS

Sherman Boy Scouts- Park Orientation and Natural History
Millinocket Literary Club- Natural History of Baxter State Park
Howland Middle School- Natural History of Baxter State Park
Dexter Health Care- Baxter State Park Through the Seasons
Lincoln High School - Envirothon Preparation - Biotic and Abiotic Components of BSP Ecosystems.
University of Southern Maine- Wildflowers of Baxter State Park
Brewer Garden Club- Flora of Baxter State Park
Orrington Center Drive School- Park Camping Orientation
Millinocket Cub Scouts- Threatened and Endangered Species of Maine and Baxter State Park
Millinocket Middle School- Togue Pond Science Camp-Maine Wildflowers
Sherman Mills 4th Grade- Baxter State Park Orientation and Natural History
Baxter SCA Trail Crew- Introduction to the Alpine Ecosystem on Katahdin
Natarswi Girl Scouts- Nature Hike and Activities for 40
*Alford Lake Camp- Leave-No-Trace techniques for groups and Alpine Ecology
*East Millinocket Catholic Church- Nature Walk and Activities for Family Fun Festival
BSP Volunteers for Peace- Nature Hike
Hogdon Middle School- Park Orientation and Natural History
"Becoming an Outdoor Woman" Weekend- Leave-No-Trace Techniques/ Introduction to Backpacking workshop/Hike up Pleasant Mountain.
"End of Trail" Slide Show- Park Resources and Management Issues
4-H National Conference- All day field trip in Baxter State Park
Unity College- Resource Management in Baxter State Park/ Careers in Conservation Law
Woodland Elementary and High School- Survival Tips(6th grade) and Alpine Ecology (7th grade)

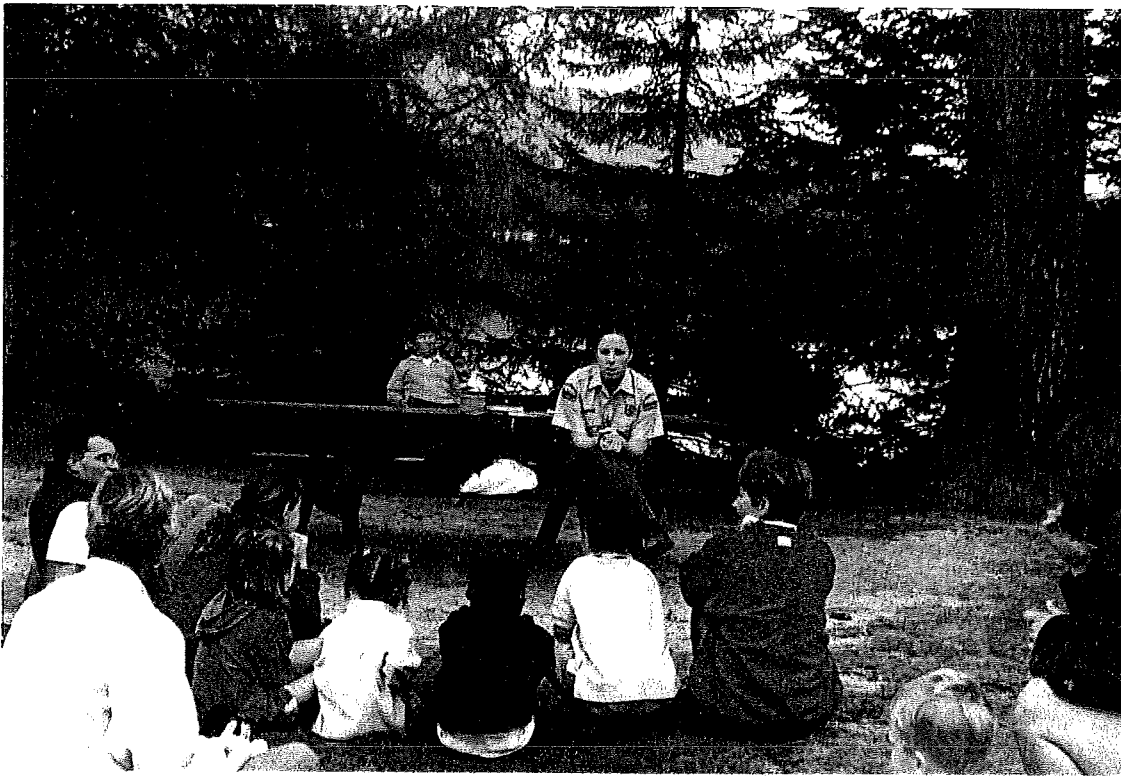
* Denotes programs run solely by Naturalist Assistant Meg Ounsworth and SCA Resource Assistant Tim Scurso.

1999 CHILDREN'S PROGRAMS AND EVENING PROGRAM SERIES

Meg Ounsworth, BSP Assistant Naturalist and Tim Scurso, SCA Resource Assistant, offered five Saturday morning programs for children in the 1999 summer season. After experimenting with holding events on other days of the week, we are back to Saturdays, which seem to yield the most attendance. Both Meg and Tim taught the first two programs, then Tim taught one alone and Meg taught two programs by herself. Two programs were held at Daicey Pond Campground, two were held at Kidney Pond Campground and one was held at South Branch. We will continue to offer these programs pending the availability of SCA Resource Assistant time and talent each year.

The 1999 evening program series included twelve offerings beginning July 7, with the final one on August 25th. Long-time volunteer Jane Thomas once again shared her renditions of Chimney Pond tales during three visits in the summer. In addition to year-round and seasonal staff presentations, we also had Donn Fendler, John Neff, Mark McCoullough and Cathy Elliott as guests. Our summer evening programs only exist by virtue of the good nature of these presenters. To each one, a big thank-you from the Information/Education staff and visitors of the Park.

(SEE: 1999 Program listings in the Appendix)



❖ Meg Ounsworth conducting a Saturday morning Children's Program at Daicey Pond.

- ❖ Standing, left to right, Helen White, Bruce White, Gabe Williamson, Sara McBride, Marcia Williamson, Elizabeth Johnston, Frank Taylor, Alan Watson, Tim Scurso, Simone Rossignol. Seated, left to right: Donn Fendler, Jean Hoekwater, Jen Hall, Meg Ounsworth.



MEETINGS/COMMITTEES

In 1999, Park Naturalist Jean Hoekwater attended and participated in meetings of the following:

Baxter State Park Advisory and Authority
 BSP History Committee
 BSP Park Use Committee
 Director's Research Committee
 Steering Committee for Conference on Women in Non-Traditional Careers in Maine State Government
 Forest Society of Maine Board
 Leave-No-Trace in Maine Steering Committee
 Regularly scheduled staff meetings

The account of Park history from 1970-1994, *In the Deeds We Trust*, by Trudy Scee, was completed this year and is now on sale at Park Headquarters as well as other retail locations throughout the state. Hence the business of the **History Committee** is completed for the time being.

The **Park Use Committee** focused on a couple of areas this year, which will be covered in more detail under the Director's report elsewhere in this publication. The first

effort involved working with staff to come up with some trial attempts pre-camping season to address use issues. As a result of PUC discussions and thoughtful tinkering on the part of the Director and Chief Ranger, Park gates opened one hour earlier in the mornings during the busiest part of the season. We also experimented with making a small percentage of parking spots available by phone reservation (at no charge) to Maine residents only. Both of these initiatives were successful in addressing concerns precipitating the actions. Throughout the year, members of the PUC group interfaced with staff and the Director and Advisory as a whole, as well as members of the Penobscot Nation in an attempt to address a request for permission for waiver of camping fees during the tribe's Labor Day 100 run. This request paved the way for a broad-ranging exploration of the Penobscot experience in the Park and their aspirations for using Park sites and facilities in the future. At the time of this writing, the Penobscots are slated for a return to Katahdin Stream Campground on Labor Day 2000.

Members of the PUC and Advisory members at large once again proved themselves indispensable during springtime hearings of legislative bills concerning Baxter State Park. The PUC's direct involvement in the discussions of the West Branch Land parcel became critical when bills (designed to prevent the Park from managing its lands with autonomy intended by Governor Baxter) were heard before the Forestry and Conservation Committee. Thankfully, several PUC members took it upon themselves to address the committee with the facts concerning our decision-making process regarding the West Branch parcel as well as the Park at large. Along with allies from conservation organizations and concerned individuals, this testimony convinced legislators that the bills were unnecessary and even damaging to the health of the Park. However, this 1999 session served to remind us of the urgent need for strong, independent allies in the Park's wilderness mission. In these politically charged hearings, it became evident that the generosity and wisdom of Governor Baxter is in danger of being ignored while more self-serving interests rule the day. Given the enormous job of educating the public and elected officials regarding our mandate and mission, it is not surprising that concerned citizens have seen a need to supplement staff efforts to protect the Park and have taken steps to create a new organization, "Friends of Baxter".

The **Director's Research Committee** met three times in 1999: April 13, September 21-22, and November 18. We did not have any projects/proposals to vote on in the April meeting so instead, we used the time to learn about a project that was approved for the 1998 season. Dr. Steve Selva of University of Maine at Fort Kent discussed his study of Caliciale or "stubble" lichens in Boody Brook and other regions in the Park. Steve showed the committee what a typical "voucher specimen" of the lichens would look like and shared slides explaining the identification and study of this order of lichens. His final report was printed in the 1998 BSP Annual Report.

Our September overnight meeting provided a fine opportunity for DRC members to view some of the new monitoring efforts Resource Manager Jensen Bissell and Forest Technician Mac Browning have incorporated into their management activities of the SFMA. The day was also a chance for the SFMA Advisory members to talk with DRC members while enjoying the various stops and walks in the SFMA.

The November meeting held in Augusta was called for the express purpose of discussing our Park research policy in philosophy and detail. The DRC members attending the September meeting had been polled for their suggestions of new people we should invite to serve on the DRC. Following discussion with the Director, three of those people were invited and attended the November 18 meeting: Dave Courtemanch, Maine Department of Environmental Protection, Dr. Kathleen Murray, Maine Department of Agriculture, and Dr. Steve Selva, University of Maine Fort Kent. The discussion focused on refining the collecting clause to resemble policies of organizations/agencies such as The Nature Conservancy, and The National Park, so that the Park retains ownership and control of any item collected. We also spent some time trying to weigh the validity/desirability of some sorts of projects, requiring collecting, i.e., a state-initiative such as the Dragonfly/Damselfly survey vs. a personal academic collecting endeavor, presence/absence studies vs. behavioral or genetic studies requiring collecting. The decision whether to allow collecting in connection with research remains a case-by-case consideration at the discretion of the Director. The afternoon discussion topics provided an excellent introduction to the central issues for the new DRC members attending. The meeting adjourned following a report from Jean on an infestation of Purple Loosestrife at Matagamon Lake Landing.

Women in Non-Traditional Careers Conference Steering Committee began meeting early in the new year to plan the theme and activities for the second conference, which was held on September 14, 1999. With the advent of Jodi Browning being hired for the Baxter State Park Ranger I opening, Jean was able to share the representation of Baxter's interests at these meetings. However, once the field season began in earnest, in June, neither Jean nor Jodi were able to attend to the extent Augusta-based steering committee members were. Nevertheless, the Park did contribute both time and effort toward making this second conference a successful offering to the women attending. One of the smallest agencies attending, the Park is very well represented at the conference. Our goal is to work toward a day when the enrichment and encouragement this conference offers to women in non-traditional jobs is obsolete and no longer needed, because the work force is enlightened and all advancement and training opportunities are equally available to both men and women! In the meantime, it speaks very well of Baxter that we have been allowed to contribute time and staff resources to this conference.

Park Naturalist Jean Hoekwater attended board meetings of the **Forest Society of Maine** when work schedules allowed. The Society is well on its way to gaining a place at the table with other land trust organizations, due to the active representation of Executive Director Alan Hutchinson and Assistant Director Leslie Hudson. Forest landowners throughout Maine are turning to the Society for advice on ways to work their land while maintaining the special qualities for future generations.

INFORMATION/EDUCATION PROJECTS

Leave-No-Trace in Maine Video

The Maine Leave-No-Trace in Steering Committee met several times in 1999 to discuss production strategies and funding opportunities for the production of a twenty minute instructional/inspirational video on using LNT principles in Maine outdoor settings. In September, Charlie Jacobi, Acadia National Park, Steve Spencer, D.O.C., Parks & Lands, Dave Getchell, Jr., Compass Light Productions and Jean Hoekwater of Baxter, submitted a proposal to the Maine Outdoor Heritage Fund for funding consideration. The project did not receive funding during the fall round but the Maine LNT Steering Committee was encouraged by the interest of the MOHF board and is now diversifying their search for funds through other grants as well as preparing to resubmit the proposal to MOHF in the spring round of applications. During the year since the inception of the project, the need for the video as a teaching tool for Maine audiences has become increasingly apparent to those of us on the Maine LNT Steering Committee. Outdoor recreationists are flocking to the woods and waters of Maine from many diverse backgrounds and locations. The video will help resource managers throughout the state speak with one voice on resource protection issues of common concern to all.

Alpine Education Initiatives

This year BSP Naturalist Jean Hoekwater supervised a Naturalist Assistant, Meg Ounsworth, for 18 weeks and SCA Resource Assistant, Timothy Scurso, for 12 weeks. Alpine Steward patrols and education projects are a strong component of these positions. In addition to Meg and Tim undertaking Alpine Steward patrols to complement the SCA Trail Crew's Mountain Patrol schedule, Tim also worked on bulletin board displays at all Katahdin trail heads and the Visitor Center. Production of multiple displays was greatly enhanced by the use of a new tool at the Park, a Sony Digital Mavica camera. This camera is just one example of donation funds at work in Park operations. We are very grateful for the extra boost the donation fund gives us, whether it is in the form of canoes, cameras or rescue equipment. This camera allowed Meg and Tim to take the shots they wanted of alpine vegetation, print the shots up in multiples off the computer and make up the posters with more speed and lower costs than we could manage using 35mm photos. They also worked at making sure the vegetation shots were not necessarily beautiful pictures of alpine flowers in bloom, since the majority of hikers do not hike during those few short weeks of bloom. Instead, they made sure the poster visuals resemble the non-flowering phase typically seen when hiking Katahdin. Meg and Tim spent time on all Katahdin trails, visiting one-on-one with hikers and groups, sharing their information and observing behavior that we can address through education.



❖ Mountain-Heath, *Phyllodoce caerulea*, on Katahdin.

Appalachian Trail Hikers

The Park brochure for AT hikers was used for the first full season this year. In general, attempts to address such a widely scattered audience will take a couple of seasons to reach the people for which it is intended. In the meantime, the reservation staff and campground personnel continue to cope with the issue of mail drops, message relays and burgeoning numbers at the Daicey AT shelters. Finally, the most vexing and potentially dangerous issue is that of late AT hikers climbing Katahdin on Class IV Days. The reality is that prospective AT hikers tend to put the most stock in the word-of-mouth anecdotes and Internet diary entries of AT thru-hikers. Until these informal sources of information reflect our policies and the consequences of not knowing or adhering to those policies, the thru-hiker community will continue their past practices. Given the substantial annual increases in use shown below, it becomes apparent that cooperation of the thru-hiker community will only become more necessary.

DAICEY FIELD LEAN-TOS

B.S.P.

THIS SITE IS RESERVED FOR
A-T THRU-HIKERS.

REGISTER WITH RANGER
UPON ARRIVAL.

BSP IS A
CARRY IN/CARRY OUT PARK.
NO TRASH/FOOD/LITTER
IN THE OUTHOUSES.

NO UNATTENDED FIRES.
EXTINGUISH ALL FIRES
BEFORE LEAVING.

CONGRATULATIONS
TO ALL HIKERS!

BSP

1998

Northbound Thru-Hikers	Southbound Thru-Hikers	Flip/Floppers	Section Hikers
401	125	38	406

Total for 1998 (through 10/22/98)= 970

1999

Northbound Thru-Hikers	Southbound Thru-Hikers	Flip-Floppers	Section Hikers
504	206	70	478

Total for 1999 (Through 10/23/99)= 1,258

Statistics for the last two years show 17 out of 155 nights in the 1998 season and 18 nights out of 165 nights in the 1999 season in which the Daicey AT shelter site was occupied by more than 12 individuals. Of those nights at over-capacity, 13 of 17 nights in '98 and 9 of 18 nights in '99 were crowded at least in part due to organized camp groups at the shelters instead of individual or small groups of bona-fide "thru-hikers".

One of the underlying trends contributing to over-capacity issues at the Daicey AT shelters is the general, overall increase of AT thru-hikers, for whom the shelters were originally set aside. However, a second factor increasing the demand for shelter capacity is organized camps. Many publish brochures and plan their trips well in advance. These camps are usually section hikers, hence better able to pinpoint the time of their arrival in the park with more ease than someone who is hiking the entire trail or even the whole 100-Mile Wilderness. Camp groups using the Daicey Pond shelters routinely number thirteen or fourteen members and in one case, as many as nineteen individuals. The trend of larger camp, scout, etc., groups monopolizing shelters along the AT is a trend recognized the entire length of the trail. In Baxter State Park, our challenge is to find ways to convince these groups that the best place for them to stay is in one of our group campsites designed for their size group. As the numbers above indicate, allocating this group use to the proper park site should help by alleviating at least some of the pressure on the AT shelters. However, even without the pressure of local camp and scout groups, there is speculation that as many as 2000 individuals could be attempting to thru-hike the AT in the summer of 2000, meaning that the Park will need to be as proactive as possible with information on our shelter limitations.



❖ Footbridge over Abol Stream on the A.T. near the West Branch of the Penobscot River

Day Use Hiking Map

Meg Ounsworth spearheaded our effort to revise the 1990 version of the Day Use Hiking Map, designed by Jean Hoekwater and Jennifer Longville. This map was originally created to occupy the information niche between the free park road map given out by the reservation office and the gates and the more detailed topographic maps produced by AMC, Clark, DeLorme, etc. In an ideal situation, hikers should travel with as detailed a map as possible. However, when it became apparent that most people visiting for a day or two were not going to buy one of the better maps but instead were willing to go on long day hikes with our free park road map, we decided it was time to create something at minimal cost that would give them some rough descriptions of day hikes and some guidelines for safe and conscientious hiking in a wilderness park. This map has been the top-selling map at the Togue Pond Visitor Center for the last few years and we were completely out by mid-season '99. A decision was made to continue to offer the product following a review of the old version. In addition to correcting and updating the map and trail descriptions (we've changed the Park boundaries twice since the original printing was done!), Meg has added descriptions of the new trails down near Togue Pond and provided a French translation of the safe hiking tips on the back of the map. The cost of the map should remain very reasonable, in large part because BSP Resource Manager Jensen Bissell has worked very hard to digitize the trails and roads, creating a map file which is camera ready for the printer to use. Using our in-house technology to accomplish this step saves money at the layout and design stage so that we can continue to offer the product at a low cost while improving the information. Using the same technology and skills, Jensen has also corrected and updated the park road map for use in the upcoming season. It is hard to keep up with all the cumulative map changes over the years but having our park map on the computer allows us to make the changes more efficiently and allows us to have smaller batches printed up each time, preventing the syndrome of needing to use up outdated versions before getting newer versions in circulation.

MONITORING PROJECTS

Katahdin Arctic Trailside Counts, 1999

Trailside counts along an established route are conducted in July each year for the endangered Katahdin Arctic butterfly. In 1999, the survey dates were July 2-3 and July 8-9. Weather is most critical in these counts, even more so than bird census work in which an experienced observer can tolerate some wind or misty or cold conditions and still achieve a count. To count Katahdin Arctics, the weather must be clear and calm. In windy or wet weather, the butterflies stay low and do not flush from vegetation as you hike along the trail. Poor conditions on both scheduled counts in '99 resulted in little opportunity for recorded sightings. Two individual butterflies were sighted on July 3rd. Due to high winds the second set of dates yielded no sightings. However, anecdotal accounts from various staff and trail crew (who have viewed preserved specimens of the butterfly) patrolling Katahdin in late July and early August '99 included several sightings of individual Katahdin Arctic butterflies at different spots in the alpine zone. With luck, the counts will be scheduled during better weather in the year 2000.

1999 Loon Maine Audubon Count

Park staff and volunteers observed the following ponds on Saturday July 17, 1999, with corresponding numbers of adults and chicks observed:

<u>Site</u>	<u>Adults</u>	<u>Chicks</u>
Abol Pond	2	0
Daicey Pond	0	0
Draper Pond	0	0
Elbow Pond	0	0
Grassy Pond	0	0
Kidney Pond	2	2
Lily Pad Pond	2	0
Little Rocky Pond	1	1
Lost Pond	0	0
Lower Togue Pond	2	0
Nesowadnehunk Lake	2	0
Rocky Pond	0	0
Tracy Pond	0	0
Upper Togue Pond	0	0
Wassataquoik Lake	2	2
Webster Lake	2	0

The weather was hot and hazy, temperatures ranged from 75-80 degrees at 7 A.M., with a strong breeze, gusting up to 20 mph in places. Our observers for 1999 were: Jessica Churchill, Huey and Irene Coleman, Jason Cooke, Ian Gordon, Tom Hanson, Jean Hoekwater, Jean and Bob Howes, Rachel Jacobs, Sven and Janet Lapiner, Sara McBride, Tomas McCahill, Meg Ounsworth, Dan Randall Simone Rossignol, Abby and Courtney Strout, Larry and Roni Strout, Frank Taylor, Judy Wentzell, Alton White, Bruce White, Mark Varney, Gabriel and Marcia Williamson. Many thanks to all these helpful people; without their participation, this ongoing monitoring would not be possible on a Park-wide scale.

High Elevation Bird Monitoring in 1999

In cooperation with the Maine Partners in Flight volunteer bird monitoring effort, the Park participates in an annual census of High Elevation Bird species. For many years, volunteers have done Breeding Bird counts on established routes along roadways throughout Maine. However, since of Maine's high elevation areas, are not roaded, this habitat has not been adequately surveyed by conventional breeding bird census techniques. To help the state track bird population trends in these communities, we have two established high elevation bird survey routes: one on Katahdin and one on North Traveler. Park Naturalist Jean Hoekwater hikes the Katahdin route and Inland Fish and Wildlife Biologist Lindsay Tudor established and hikes the North Traveler route.

High winds, precipitation and difficult terrain all conspire against a successful survey of birds in this habitat. The birds are tallied by doing 10 minute point counts at

each of 5 or more survey points along the route. No playback tapes are used and observers depend primarily on hearing rather than seeing the birds.

1999 survey dates on Katahdin were 6/8 and 6/14. North Traveler was surveyed on 6/25. Species counted on at least one or more of these surveys include:

American Goldfinch, American Pipit, American Robin, Bicknell Thrush, Blackpoll Warbler, Boreal Chickadee, Common Yellowthroat, Dark-Eyed Junco, Hermit Thrush, Magnolia Warbler, Nashville Warbler, Pine Siskin, Purple Finch, Red-Breasted Nuthatch, Ruby-Crowned Kinglet, Swainson's Thrush, White-Throated sparrow, Winter Wren, Yellow-Rumped Warbler.

Two species of particular interest to the Partners in Flight program are the American Pipit and Bicknell Thrush. The only place the Pipit is found to breed in the state of Maine is on the Tableland of Katahdin. We may also have a sizeable population of Bicknell Thrush in the Great and South Basins. Of the surveys done this year, at least one Bicknell was heard at 6 out of 8 stations (6/5) and again at 5 out of 8 stations (6/14) on our survey route from Chimney Pond. Bicknells have also been heard on North Traveler but this year's survey on 6/25 picked up none. It may have been timed a little too late to catch the bird's peak singing/courtship phase however, so we will continue counts on the route as long as feasible. Raw data from all three 1999 High Elevation surveys is filed with the Partners in Flight office in Bangor with a copy kept in the BSP Naturalist's office in Millinocket as well.

In addition, a summary report of the Horse Mountain roadside breeding bird survey conducted by Lindsay Tudor on 6/22/99 is included in the Appendix following this report.



❖ Naturalist Assistant Meg Ounsworth and SCA Resource Assistant Tim Scurso at Station # 8 on the High Elevation Bird Survey, Katahdin, June '99.

Mountain Patrol

A close look at the numbers as they appear in the raw data for '99 as well as the comments some patrollers recorded can give us a clear picture of resource issues we will be facing. At least a couple of patrollers noted people's tendency to cut down over the tundra from the uphill (peak) side of the Saddle down to the top of the slide. The trail curves gently away from the mountain's edge and then curves back in to meet the top of the slide. The area hikers are using is flat and gravelly, without as many boulders and steps in places. It is also showing signs of "blow-out", with the patches of *Diapensia* dying off noticeably in places. In addition, the open gravel is used conspicuously by displaying American Pipits. Displays are usually done near their nests (on the open ground). It is important hikers learn the reason the trail is the best place to hike and that we communicate more strongly the necessity for them to respect the environment they are visiting. Data also indicates that Thoreau Spring is hosting numbers larger than desirable based on the surrounding area's importance to the Katahdin Arctic butterfly and the American Pipit. As many as 30-50 people are regularly found in the near vicinity. The numbers force people to spread out on to the sedge plants and the resulting eventual die-off of vegetation from trampling will impact the very isolated and sedge community-dependent species mentioned above. To counter these problems, increased information

below treeline and on site as well as one-on-one human contact will need to be devoted to these issues.

1999 MOUNTAIN PATROL

Number of forms: 41

Number of Patrols by month: June - 8

July- 14

August - 12

September - 5

October - 2

Observation Point	# of times this observing point	Min-Max #'s seen	Avg.#'s seen on a patrol
Baxter Park	61	0-80	24
South Peak	4	5-30	15
Chimney Peak	1	7	7
Pamola Peak	22	0-70	10
Knife Edge	3	12-35	24
Dudley	1	0	0
Baxter Peak Cut-Off	21	0-26	6
Saddle	28	0-23	6
Cathedral	3	3-28	13
Hamlin	9	0-9	1
Thoreau Spring	23	0-50	7
Gateway (Hunt Trail)	1	5	5
Caribou Spr/NW Plateau	1	0	0
Howe Peak	2	0	0

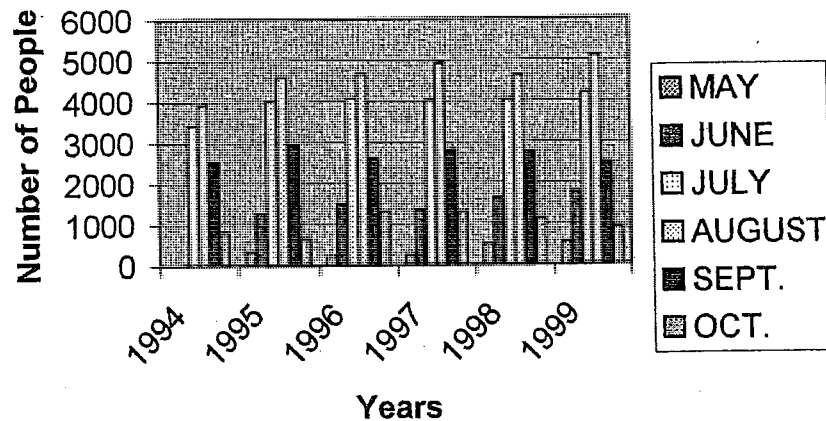
Alpine Steward Patrols

Alpine Steward Patrols are carried out by the Assistant Naturalist and SCA Resource Assistant to assess educational needs and share alpine ecology information with visitors. With only one SCA worker in the summer of '99, and numerous conflicting demands, Alpine Steward patrols were not done as often as desirable. However Trail Crew Mountain Patrols and Alpine Steward Patrols both share an educational component. Fortunately, during '99, the number of Mountain Patrols was higher than the total for most summers, implying that many visitors had an opportunity to talk with uniformed representatives of the Park. The emphasis on Mountain Patrol has been collecting trail statistics and promoting safety while protecting the environment. The emphasis in Alpine Steward patrols is in educating visitors, observing and addressing visitor behavior affecting the alpine zone and generating new ideas to accomplish protection of high elevation resources. Hence, observations from Alpine Steward patrols tend to be more anecdotal, less quantitative. Places of concern were noted: the top of Abol Slide, Thoreau Springs, Baxter Park and the top of Saddle Slide. Need for additional "Please stay on trail" signs was pinpointed (new signs were installed by Trail Crew before the summer's end). There is a continued feeling expressed in the patrol logs that posting stewards above treeline may be only one part of the solution. Patrol logs emphasize the need for more and

different contacts before hikers enter the alpine zone. It is not unusual for Alpine Stewards to encounter 90-150 people per day on the routes they hike to climb Katahdin. This is a good numerical measure of the general visitor's contacts with other visitors and bears importance in the overall discussion of managing for wilderness values. For summer 2000, we will have a new supply of "Please Don't Be A Tundra Stomper" buttons to hand out during patrols as well as a second hand held radio to maximize patroller effectiveness and safety. We will continue to explore and experiment with new ideas to raise the awareness of hikers enjoying our alpine areas.

TOGUE POND VISITOR CENTER

VISITOR CENTER FIVE YEAR COMPARATIVE STATS



❖ Note: Typical season runs Memorial Day-Columbus Day. In 1994, the Visitor Center opened in July and ran through Columbus Day.

The Visitor Center entered its sixth season of operation in 1999. Clerk II Nancy Moxley Guay went on maternity leave in mid-July. Over the years the Visitor Center has become a routine stop for most visitors entering the south end of the Park. For that reason, Park Director Caverly and staff worked very hard to provide continued, qualified coverage in 1999. Alisa MacArthur worked from July through most of August when she returned to college. Verda Peabody took over around Labor Day, one of our very busiest periods, and worked until the facility closed after Columbus Day. In addition to this coverage, two days a week the Visitor Center was covered by other staff, primarily Jean Howes, Clerk-Typist II, on loan from Headquarters, Sara McBride, Togue Pond CA, Meg Ounsworth, Assistant Naturalist and Tim Scurso, SCA Resource Assistant.

With the Park Director's support, a request has been made for an additional Clerk II position at the Visitor Center. Duties of other staff willing to help in the past seasons

have grown to the point they are unable to continue to provide the additional help we need to cover repeated gaps in coverage due to days off, sick leave and vacation days. If approved through the state budgetary process, this 21-week position will begin in the new 2001 fiscal year (July 2000).

A final note of thanks to each and every person who pitched in to give breaks to Visitor Center staff or provide coverage of the facility during this and other seasons. Also a note of congratulations to Nancy and Stewart Guay, proud parents of baby Gwendolyn Guay, born Sept. 3, 1999. Word has it she is already cutting her teeth on Park guide books and maps!

1999 TRAINING OPPORTUNITIES

Arthur Carhartt Wilderness Education Course

Jean Hoekwater attended a "Wilderness Education" course offered through the Arthur Carhartt Wilderness Training Center on April 10-15, 1999 in Albuquerque, New Mexico. The program included a day trip to visit with elders of the Isleta Pueblo and classroom sessions updating participants on regional efforts to create awareness and advocates for wilderness areas. Particular attention focussed on:

- The implementation of Leave No Trace education across a broad spectrum of agencies and populations
- An extensive overview of U.S. demographic trends as they pertain to public support for wilderness management and initiatives.
- An update on the responsibilities of wilderness areas regarding The Americans with Disabilities Act.

Examples of region-specific programs from Alaska, Arizona, California, Colorado, Florida, Washington and Virginia were featured. The experience resulted in many valuable contacts with peer wilderness professionals working to meet many of the same challenges Baxter State Park faces.

Leave No Trace Traveling Trainers in BSP

A two-person team of Leave No Trace Traveling Trainers visited Maine in late June 1999. In addition to offering several sessions in downeast Maine, coordinated by Charlie Jacobi of Acadia National Park, the trainers ventured inland to teach a course in Baxter. Because BSP staff are generally well in the midst of their season by this time, operationally, we could not afford to allow all staff interested in the course to attend. However, two staff and one volunteer most directly involved in using LNT education were able to attend: Meg Ounsworth, Assistant Naturalist, Tim Scurso, SCA Resource Assistant and Brendan Curran, CRI, Russell Pond. Individuals from BSA High Adventure Base, Acadia, Dept. of Conservation, and a registered Maine Guide made up the remainder of the class. The two-day introductory course consisted of ½ day inside instructional session and an overnight in the Park, with additional instruction in the field. It was an excellent opportunity for professionals from various groups and agencies to share information and hone their skills in practicing and relaying LNT principles to recreationists. Tentative plans call for another BSP-hosted course with the LNT Traveling Trainers in June 2000.

**1999 INFORMATION/EDUCATION
AND RESEARCH APPENDIX**



children's Nature Programs



Nature Notes

creating nature journals

Saturday, June 26 10:00am
Kidney Pond Campground Library

Adventure Bound

scavenger hunt

Saturday, July 10 10:00am
Daicey Pond Campground Library



Aquatic Alive

search for water loving amphibians and plants

Saturday, July 24 10:00am
South Branch Pond Campground



The Living Woods

educational nature walk

Saturday, August 7 10:00am
Kidney Pond Campground Library



Environmental Mesh

understand the web of life

Saturday, August 21 10:00am
Daicey Pond Campground Library



Parents are always welcome!

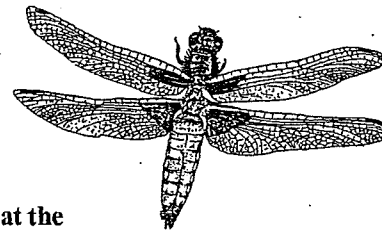
Program most appropriate for ages 6-12

Rain or shine - see you there!

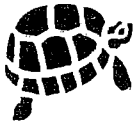


1999 SUMMER PROGRAM SCHEDULE

Unless otherwise noted, all evening programs are held at 7:00 P.M. at the campground library in the host campground. This schedule is subject to change due to circumstances beyond our control.



July 7 (Wednesday), Kidney Pond: "So You Think You Want to Be a Ranger...!" by Robert Howes.



Learn the "ins" and "outs" of rangers from year-round Baxter State Park Ranger Robert Howes. Find out if a lifetime of black flies, beautiful sunsets and close encounters with the wildlife and human visitors of Baxter State Park is your cup of tea!

July 12 (Monday), Daicey Pond: "Chimney Pond Tales" by Jane Thomas.

Join writer and artist Jane Thomas as she tells the tall tales of legendary Katahdin guide Leroy Dudley and his impressive sidekick, Pamola.

July 14 (Wednesday), Kidney Pond: "Mid-summer Nature Ramble" with BSP's nature interpreters.

We'll explore the woods and shoreline near Kidney Pond Campground, becoming acquainted with some of the obvious as well as the not-so-obvious inhabitants of this beautiful area. Come prepared with clothing and footwear for a moderate hike.

July 21 (Wednesday), Daicey Pond: "An Introduction to 'Leave No Trace' Techniques" by Gabe Williamson.

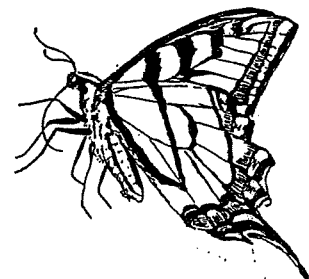
Join campground ranger and U.S.M. instructor Gabe Williamson as he shares tips on Leave-No-Trace camping and outdoor ethics.

July 26 (Monday), Daicey Pond: "Chimney Pond Tales" by Jane Thomas.

Join writer and artist Jane Thomas as she tells the tall tales of legendary Katahdin guide Leroy Dudley and his impressive sidekick, Pamola.

July 28 (Wednesday), Kidney Pond: "Where is Blunder Pond?"

An introduction to the Scientific Forest Management Area in Baxter State Park by Jensen Bissell and Mac Browning. Learn about recreational sites in this specially managed part of the Park. Jensen and Mac will explain current operations and discuss its importance to the long-term financial stability of the park.



August 4 (Wednesday), Daicey Pond: "Lost on a Mountain in Maine" by Donn Fendler.

Donn returns to Baxter State Park each summer to share the story of his survival so people of all ages can learn and gain inspiration from the saga.



August 11 (Wednesday), Kidney Pond: "The Early Days" by John Neff.

John will recount tales of the people and events preceding the modern era of park management. Learn about some of the local explorers, Native Americans, and some of the first hiking routes in the Park.



August 16 (Monday), Daicey Pond: "Chimney Pond Tales" by Jane Thomas.

Join artist and storyteller Jane Thomas as she shares the tall tales of legendary Katahdin guide Leroy Dudley and his impressive sidekick, Pamola.

August 17 (Tuesday), Kidney Pond: "Biodiversity in the Forests of Maine" by Cathy Elliott.

Cathy is a wildlife biologist and the program administrator with the University of Maine Cooperative Extension. She will be discussing the ways professionals in Maine are working to foster biodiversity in Maine's forests. She will highlight some of Baxter Park's unique areas and their contributions to the diversity of life in Maine's forests.

August 18 (Wednesday), Daicey Pond: "Maine Amphibians and Reptiles" by Mark McCollough.

Mark is in charge of Maine's Inland Fisheries and Wildlife Department's Non-Game Division and is also the editor of the revised edition of Maine Amphibians and Reptiles. He will introduce you to these fascinating residents of Maine's wetlands and explain how we can ensure their survival.

August 25 (Wednesday), Kidney Pond: "The Bear Truth" by Chris Drew.

Laugh along with Baxter State Park Chief Ranger Chris Drew as he recounts bear tales and other true accounts of life on the wild side in this part of Maine!



7/8/99

Baxter Park Visitors 1999

All 50 states represented by license plates

Canadian provinces represented by license plates:

Quebec	Prince Edward Island
Ontario	Alberta
New Brunswick	Manitoba
Nova Scotia	British Columbia

International Visitors

England	Germany
Japan	New Zealand
Northern Ireland	Brazil
Netherlands	South Africa
Columbia	Mexico
Austria	Poland
Luxembourg	Czech Republic
Italy	Switzerland
France	Belgium
Australia	Slovenia
Spain	Puerto Rico
Israel	British Virgin Islands
Scotland	Portugal
Sweden	Costa Rica
Turkey	India
Malaysia	Republic of Ireland

RESEARCH UPDATES AND REPORTS

*In the interest of brevity and with apologies to the authors, excerpts only; please contact BSP Headquarters for a copy of the complete report you are interested in.

**INFLUENCES OF TIMBER HARVESTING AND TRAPPING ON HABITAT
SELECTION AND DEMOGRAPHIC CHARACTERISTICS OF MARTEN**

By Dr. David C. Payer

Thesis Advisor: Dr. Daniel J. Harrison

An Abstract of the Thesis Presented

in Partial Fulfillment of the Requirements for the

Degree of Doctor of Philosophy

(in Wildlife Ecology)

August 1999

American marten (*Martes americana*) have large spatial requirements and specific habitat needs. Presumed habitat requirements of marten form the basis for some forest-management regulations, although few studies have evaluated the effects of timber harvesting on demographic performance. Trapping may confound studies of demography and habitat associations by reducing marten density. Therefore, I investigated habitat selection and demographic characteristics of 163 (87 M, 76 F) radiocollared, nonjuvenile (≥ 1 yr) marten in an untrapped reserve, a trapped industrial forest, and an untrapped industrial forest in Maine. I also compared structural characteristics of mature, insect-defoliated, and clearcut stands receiving different intensities of marten use.

Areas receiving use by marten had greater tree height, basal area, and snag volume than unused areas. Volume of woody debris and understory foliage density was similar in regenerating and mature stands. Insect-defoliated stands with <50% overstory canopy closure were intensively used, suggesting that vertical structure provided by large snags can substitute for live trees, and that marten do not require a closed overstory canopy. In managed stands, I recommend maintenance of >18 m²/ha basal area in live trees and snags, protection of advance regeneration, and retention of woody debris.

Clearcutting reduced marten density because marten avoided regenerating clearcuts when selecting territories. In the trapped area, trapping mortality was additive for males and further reduced marten density. In both industrial-forest treatments, incidence of lactation in adult females and natural-mortality rates were comparable to the reserve because marten selected high-quality territories with proportionally more mature forest and less young forest than was available in the landscapes. Few marten maintained ranges with >40% early successional forest.

Within home ranges, marten also avoided young stands. Marten did not select among mature deciduous, coniferous, or mixed forests, suggesting that overstory type should not be considered a criterion of habitat quality *per se*. Marten in the industrial-forest treatments maintained larger territories than marten in the reserve, and home-range area was inversely related to the proportion of mature forest within the range. Density of lactating females was 3x greater in the reserve than in either industrial-forest treatment, suggesting that timber harvesting decreased population-level productivity by reducing suitable habitat; marten generally did not maintain ranges that compromised individual performance.

CHAPTER 1

INFLUENCE OF SITE-SCALE HABITAT CHARACTERISTICS ON HABITAT USE BY MARTEN

ABSTRACT

American marten (*Martes americana*) are frequently reported to require late-successional, conifer-dominated forests. In the northeastern United States, however, marten use mixed coniferous-deciduous and deciduous-dominated forests, as well as forests defoliated by insects or managed for fiber. Regional contradictions in reported habitat requirements at the scale of the forest stand suggest that structural attributes other than stand age and dominant overstory type are important determinants of habitat suitability for marten. Characteristics of forest structure contributed by coarse woody debris, understory vegetation and overstory vegetation have functional significance to marten, and may be the common currency through which habitat suitability for marten should be assessed. Thus, I compared forest structural attributes between areas receiving different intensities of use by marten. My objectives were to identify specific, site-scale characteristics associated with patterns of spatial use by marten and to offer recommendations for silvicultural practices that would maximize future habitat quality for marten in managed forests.

I used radio-location data from resident, nonjuvenile (≥ 1 yr) marten in Maine to identify areas of high use-intensity and low use-intensity in an industrial forest managed for pulpwood and in a forest reserve. I also identified unused areas in the industrial forest that had been harvested via clearcutting 10-20 years prior to my study and were adjacent to used areas. Characteristics of coarse woody debris, understory vegetation and overstory vegetation in each area were quantified using standard mensurational techniques. In the industrial forest, overstory features related to stand maturity were most useful for discriminating between areas receiving different intensities of marten use. Used areas had taller trees, higher live-tree basal areas, and greater snag volumes than unused areas. Further, among areas receiving use by

marten, higher use intensity was associated with greater deciduous basal area. Ground and understory structure was not limiting in any use-intensity category. Few habitat differences were detected between high-use and low-use areas in the forest reserve, suggesting that other factors (e.g., intraspecific competition associated with high marten density) may have been responsible for patterns of marten spatial use where the landscape was dominated by mature, well-stocked forests and marten population density was high.

Based on my results, I propose stand-scale management guidelines to predict when overstory development in regenerating stands becomes sufficient to support marten. These guidelines include live-tree basal area $\geq 18 \text{ m}^2/\text{ha}$, mean tree height $\leq 9 \text{ m}$ for trees with dbh $\geq 7.6 \text{ cm}$, and snag volume $\geq 10 \text{ m}^3/\text{ha}$. Methods of forest harvesting that retain some overstory characteristics may be consistent with conservation of marten habitat in managed forests. My guidelines can be used for developing stand-scale harvesting strategies in forests that support marten; however, companion studies suggest that landscape-scale habitat requirements of marten must also receive management consideration.

CHAPTER 2

STRUCTURAL DIFFERENCES BETWEEN FORESTS REGENERATING FOLLOWING

SPRUCE-BUDWORM INFESTATION AND CLEARCUT HARVESTING:

IMPLICATIONS FOR MARTEN

ABSTRACT

American marten (*Martes americana*) avoid recent and regenerating clearcuts when establishing home ranges. Forest stands with a history of extensive defoliation and tree mortality due to an eastern spruce-budworm (*Choristoneura fumiferana*) epidemic are not avoided, however. This suggests that habitat attributes preferred by marten occur in budworm defoliated stands, but are lacking in some harvested areas. Important habitat attributes may include characteristics of overstory vegetation, understory vegetation, and coarse woody debris. In this study I quantified site-scale habitat differences between stands regenerating following spruce-budworm defoliation versus stands regenerating following clearcutting. My objectives were to identify features of forest structure with functional significance for marten that are lacking in some managed stands, and to propose goals for silvicultural practices that more closely resemble natural disturbance, thus improving habitat quality for marten. I used standard mensurational techniques to quantify characteristics of overstory vegetation, understory vegetation, and coarse woody debris in stands clearcut 10 - 20 years prior to my study that were not used by resident, adult marten. The protocol was repeated in nearby stands that were defoliated by eastern spruce

budworms 10 - 20 years previously and did receive marten use. In contrast to regenerating clearcuts, features associated with stand maturity were retained in budworm-defoliated stands, i.e., defoliated stands had greater volumes of snags, downed logs, and root masses, and included taller trees. Although live-tree basal area was similar between stand types, my results suggest that vertical structure provided by large snags can offset limited availability of live trees for marten, particularly where coarse woody debris and understory vegetation are plentiful. Habitat quality for marten may be enhanced in stands under even-aged management by retention of cull trees and snags to provide basal area of live trees and snags exceeding 18 m²/ha. Uneven-aged silvicultural systems, which more closely mimic natural disturbance by defoliating insects, have particular promise as a management tool for maintaining marten habitat. I recommend that future research focus on marten-habitat relationships in stands regenerated by uneven-aged management.

CHAPTER 3

INFLUENCES OF TIMBER HARVESTING AND TRAPPING ON HABITAT SELECTION AND HOME-RANGE CHARACTERISTICS OF MARTEN

ABSTRACT

American marten (*Martes americana*) require complex horizontal and vertical structure, which is provided by a variety of forest types across the geographic range of the species. Early successional stands regenerated by clearcut logging lack some structural features present in mature and naturally disturbed stands, and may be avoided by marten for several decades following harvest. The effects of timber harvesting on habitat associations of marten have formed the basis for some forest-management plans, and marten have been used as an ecological indicator species for forest ecosystem health. Despite the political and economic importance of marten, most studies of marten-habitat associations in relation to forest harvesting have included trapped populations. Trapping may confound effects of harvesting because trapping can further depress population density in harvested landscapes, which may alter patterns of habitat selection. To isolate the effects of timber harvesting and trapping on habitat associations of marten, I investigated landscape-scale and stand-scale habitat selection of 105 resident, nonjuvenile (≥ 1 yr) marten in 3 contiguous areas representing different forest-management scenarios: (1) an untrapped forest reserve dominated by mature forests (25 M, 8 F); (2) a trapped, extensively-clearcut industrial forest (22 M, 15 F); and (3) an untrapped, extensively clearcut industrial forest (20 M, 21 F). I also compared home-range areas of marten between these 3 management scenarios, and investigated the relationship between area and forest-type composition of marten home ranges.

At the landscape scale, marten selected for mature (> 9 m tree height) deciduous, coniferous and mixed coniferous-deciduous forest types and against young forests (≤ 6 m tree ht) in both industrial-forest treatments; immature (6.1 - 9 m tree height) forests had intermediate selection indices. Evidence for landscape-scale selection was weakest among yearlings (1 yr) in the untrapped area, where mean marten density was 1.6x greater than in the trapped area,

and new residents were forced to establish home ranges in relatively marginal habitat. Within home ranges, marten in both industrial-forest treatments avoided young forests and selected for mature forest types. This pattern was more pronounced among marten in the untrapped area than the trapped area, suggesting that marten forced to establish territories in marginal habitat compensated by using habitats more selectively within their ranges. In contrast to the industrial forest, I did not observe evidence for landscape-scale selection by marten in the reserve, despite that stands recovering from severe spruce-budworm defoliation characterized by reduced (< 50%) canopy closure of dominant trees were present within a matrix of mature forest types. At the stand scale, budworm-defoliated stands had the highest selection index. I did not observe differences between summer and winter in home-range composition or proportional use of habitats within ranges of marten in either industrial-forest treatment or in the reserve. Further, I did not observe differences in selection among mature deciduous, coniferous, and mixed coniferous-deciduous forest types at either spatial scale in any forest-management treatment.

Marten in the industrial-forest treatments maintained larger home ranges than marten in the reserve. Within the industrial forest, home-range area was positively correlated with the proportion of young and immature forest, and negatively correlated with the proportion of mature forest within the range. The median proportion of young forest within marten ranges was 27% (n = 55) in the trapped industrial forest and 17% (n = 75) in the untrapped industrial forest; < 17% of marten in both treatments (n = 130) maintained ranges composed of > 40% young stands.

My results suggest that marten respond to forest harvesting at multiple spatial scales, and scale-specific responses are sensitive to population density. Home-range area of resident, nonjuvenile marten varied inversely with the proportion of preferred habitat within the range, and may be a useful index of habitat quality. This index is regionally specific, however, and could be confounded by non-anthropogenic effects such as population cycles of preferred prey. In extensively harvested landscapes, marten may be constrained by increased energetic costs associated with maintenance of larger territories and increased risk of predation in early successional stands. Trapping may alleviate this constraint by reducing population density, allowing marten to establish territories in the highest-quality residual stands. Marten select territories with <40% early successional forest and avoid young stands within their territories to maintain levels of individual performance comparable to marten in unharvested areas. Landscape-scale selection against early successional forest causes carrying capacity of harvested areas to be reduced relative to unharvested forestlands. Age and species composition of forest stands are poor predictors of habitat occupancy by marten. Management of industrial forests for marten should include site-level approaches to meet structural requirements within harvested stands, and retention of adequate areas of the landscape in residual forest to meet marten-population goals. Further research should address the effects of forest fragmentation (i.e., patch size and isolation) on spatial use and demographic performance of marten in a high-density population within a harvested landscape.

CONCLUSIONS AND MANAGEMENT IMPLICATIONS

Resident, nonjuvenile marten in the industrial-forest treatments maintained larger home ranges than marten in the reserve. Within the industrial forest, home-range area was positively correlated with the proportion of young (≤ 6.0 m tree height) and immature (6.1 — 9.0 m tree height) forest, and negatively correlated with the proportion of mature (>9.0 m tree height) forest within marten ranges. This is consistent with results of habitat-selection analyses that

demonstrated avoidance of young forests at the stand scale, and suggests that marten in extensively harvested landscapes may be constrained by increased energetic costs associated with maintenance of larger territories. My results support the hypothesis that home-range area is inversely related to habitat quality for resident, nonjuvenile marten (Buskirk and McDonald 1989), although differences in home-range area related to geographic location (Buskirk and McDonald 1989) and population cycles of preferred prey species (Thompson and Colgan 1987) may confound this relationship.

Marten demonstrated landscape-scale selection for mature forests in both industrial-forest treatments, and avoided immature and young forests when establishing home ranges. Compared to other marten in the industrial-forest treatments, this tendency was least pronounced among yearlings in the untrapped area. This suggests that, within an extensively harvested landscape, young marten in an increasing population may be excluded from preferred habitats and forced to occupy marginal areas. However, this effect did not appear to cause decreased survival or reproductive success among yearlings in the untrapped area relative to other resident marten in the industrial forest (Chapter 4). This demonstrates that marten can respond to retrogression at habitat change at multiple spatial scales. Studies of habitat associations of marten should specifically identify spatial scale, and should include multiple scales when assessing effects of habitat changes.

Although some individual marten maintained ranges with high proportions of early successional stands, previous studies (Hargis and Bissonette 1997, Chapin et al. 1998) suggested that resident, nonjuvenile marten will not occupy areas composed of > 25 - 30% early successional forest. My data suggest that few marten will establish territories including > 40% early successional forest, implying that marten density in managed forests may decline abruptly when > 40% of the landscape is harvested. My estimated threshold is higher than previous estimates because I included a high-density (i.e., untrapped) marten population in which marten saturated suitable habitats, and the early successional stands in my study retained some structural features usually associated with mature forests (Chapter 1). Marten avoid early successional stands at the landscape scale because occupancy of these stands may increase risk of predation (Thompson and Harestad 1994) and decrease foraging success (Thompson and Colgan 1994) relative to mature forests. The risks and energetic costs of maintaining ranges including early successional forests apparently become significant when these forest comprise > 40% of the range. Size and isolation of residual-forest patches is also an important consideration, however~ consolidating clearcuts to retain large patches of mature forest could help maintain marten populations in harvested areas by meeting the spatial requirements of breeding units (i.e., adult marten of the opposite sex with overlapping territories; Chapin et al. 1998). Future research should address the effects of forest fragmentation (i.e., patch size and isolation) on patterns of spatial use and demographic performance of marten in a high-density population within an intensively managed landscape.

Within home ranges in the industrial forest, marten avoided young (≤ 6 m tree height) stands regenerated by clearcutting, although these stands were defended against same-sex conspecifics (Appendix 0), were traversed to reach residual forest patches, and probably provided fruits, which were a common food source during fall and early winter (Lachowski 1997). Stand-scale avoidance of young stands was more pronounced in the untrapped than the trapped industrial forest, consistent with evidence for less landscape-scale selectivity among young marten in the untrapped treatment. Compared to mature stands, young stands had few snags, low live-tree basal area, and low mean tree height (Chapter 1), resulting in lower

abundance of some preferred prey species (Lachowski 1997) and perhaps increased risk of avian (Pulliainen 1981, Hargis and McCullough 1984) and mammalian (Hodgman et al. 1997) predation.

Similar to results presented by Chapin et al. (1997), I did not observe evidence for landscape-scale habitat selection among marten in the forest reserve. Stands recovering from defoliation by the eastern spruce budworm, which had <50% overstory canopy closure of mature (> 12 m) trees, were not avoided relative to mature, closed-canopy forests. Further, insect-defoliated stands had the highest stand-scale selection index of any forest type in the reserve. These stands retained residual mature trees and had abundant snags and downed woody debris (Chapter 2), which provided habitat for marten prey species (Lachowski 1997). Additionally, insect-defoliated stands probably offered marten favorable microsites for hunting, opportunities for subnivean access and winter resting sites, and escape cover from mammalian and avian predators.

Contrary to the paradigm that marten prefer mature to overmature, conifer-dominated forests (e.g., Kohler and Homocker 1977, Strickland and Douglas 1987, Thompson 1988, Koehler et al. 1990, Thompson and Harestad 1994), I observed no evidence that marten selected among mature deciduous, mixed, or coniferous forests at the scale of the landscape or stand. This observation was consistent across seasons and forest-management treatments. Further, home ranges of marten in the reserve and the industrial-forest treatments (n = 186) included more deciduous forest (median: 25.0%; range: 0.0 — 72.9%) than mixed (median: 12.7%; range: 0.0 - 75.2%) or coniferous (median: 15.1%; range: 0.0 - 64.2%) forest. This suggests that structural requirements of marten can be met in a variety of mature forest types in Maine, and forest type should not be considered a primary determinant of habitat quality for marten *per se*. Structural features such as downed woody debris, snags, low overhead cover, tree height, and basal area have functional significance for marten (e.g., Hargis and McCullough 1984, Buskirk et al. 1988, Buskirk et al. 1989, Sherburne and Bissonette 1994, Taylor and Buskirk 1994, Thompson and Curran 1994) and contribute directly to habitat suitability. Therefore, fine-scale assessments of marten habitat should be based on forest structure rather than overstory species composition (Chapters 1 and 2).

Patterns of landscape-scale and stand-scale habitat selection by marten did not differ between summer and winter in the reserve or the industrial-forest treatments. Although marten may have heightened requirements for overhead cover and near-ground structure during cold periods (Buskirk et al. 1989, Taylor and Buskirk 1994), my data support the conclusions of Chapin et al. (1997a) that these requirements are met in a variety of forest types in the northeastern U.S. I did observe smaller home ranges during winter than summer, suggesting that marten may have selected specific site-level habitat features, repeatedly used the same resting sites, and limited their movements during winter. Lack of differences in landscape-scale and stand-scale habitat selection between seasons implies that marten were not habitat limited in winter relative to summer, even in the high-density, untrapped industrial forest.

Marten in the industrial-forest treatments responded to loss of mature forests by selective use of habitat at the scales of the landscape and stand. When early successional stands regenerated by clearcutting were included within home ranges, these stands were avoided but defended against sympatric, conspecific marten, and home-range area increased. Heightened energetic demands associated with defending larger ranges, in addition to increased risk of predation and lower foraging success in early successional stands, probably imposes an upper-

level constraint on establishment of territories in forests where clearcutting has occurred. Therefore, clearcutting reduces the carrying capacity of landscapes for marten. In harvested areas where trapping occurs, further reductions in population density may relax landscape-scale constraints on habitat selection. Regardless of density, however, resident, nonjuvenile marten do not appear to establish territories in which habitat conditions lead to increased mortality from natural causes or decreased incidence of reproduction in females (Chapter 4).

Traditional approaches to managing habitat for marten have emphasized forest age and species composition at the scale of the forest stand. My work suggests that availability of mature and naturally disturbed forests at the scale of the landscape is a better predictor of patterns of occupancy by marten than these stand-scale characteristics. Specific structural features used by marten (e.g., snags, live trees, tow overhead cover, and woody debris) may occur in excess of requirements in a variety of mature, immature, and naturally disturbed stands (Chapin et al. 1997b, Chapters 1 and 2), regardless of stand age and species composition.

Further, some forms of partial forest harvesting may preserve vertical and horizontal structural complexity, and may therefore maintain resident, nonjuvenile marten in intensively managed forests (Soutiere 1979, A. Fuller and D. Harrison, University of Maine, Orono, Maine, in progress). Management of industrial forests for marten should therefore be directed at meeting thresholds for structural requirements in harvested stands (Chapter 1), and retaining adequate areas of the landscape in residual forest to meet marten-population goals. My work suggests that marten density will decline nonlinearly as the proportion of forest converted to early successional stands by clearcutting increases; when early successional forest comprises > 40% of a landscape, marten density could decline exponentially. My study did not directly address the effects of forest fragmentation on marten-habitat associations, however. Chapin et al. (1998) found that marten in a trapped population within an extensively clearcut landscape selected home ranges dominated by a single contiguous patch of residual forest, suggesting that consolidating clearcuts to retain large stands of mature forest could help retain marten in intensively managed forests. However, the density of the marten population studied by Chapin et al. (1998) was less than half the density of the population I studied in the untrapped industrial forest. Because I demonstrated weaker patterns of landscape-scale habitat selection among some marten in the untrapped industrial forest relative to the trapped area, I urge that the effects of fragmentation be further studied in a high-density population.

CHAPTER 4

INFLUENCES OF TIMBER HARVESTING AND TRAPPING ON

DEMOGRAPHIC CHARACTERISTICS OF MARTEN

ABSTRACT

American marten (*Martes americana*) are associated with habitats providing complex woody structure. Structural requirements may be met in a variety of mature and naturally disturbed forest types across the geographic range of the species. Several recent studies have investigated the effects of logging on marten, and marten have been used as indicator species for

forest-ecosystem health. Marten-habitat associations have also formed the basis for some forest-management plans, resulting in restrictions on forest harvesting. Marten generally avoid early successional stands following clearcutting, and marten densities decline in extensively clearcut landscapes. Despite that indices of fitness are essential for assessing habitat quality for wildlife, few studies have investigated the effects of forest harvesting on demographic performance of marten populations. Further, available studies were confounded by trapping, which can affect population parameters (e.g., density, age and sex structure) independent of habitat conditions. To evaluate the individual effects of timber harvesting and trapping on marten, I compared density, cause-specific mortality, survival, age and sex structure, and reproductive performance among 143 nonjuvenile (≤ 1 yr) marten on 3 contiguous areas in northcentral Maine. The areas included an untrapped forest reserve dominated by mature forests, an untrapped, extensively clearcut industrial forest, and a trapped, extensively clearcut industrial forest.

Density of resident, nonjuvenile marten was 2x greater in the forest reserve than in the untrapped industrial forest, suggesting that clearcutting reduced the carrying capacity of the harvested landscape. Trapping further reduced marten density in the trapped industrial forest via additive mortality of males, resulting in a 3x greater density in the reserve than the trapped area. Rates of natural (e.g., predation, starvation, and disease) mortality and incidence of lactation did not differ between forest-management treatments. Further, although males tended to be younger in the trapped industrial forest than the untrapped industrial forest or the reserve, female age structure did not differ between treatments and most females retained breeding opportunities (i.e., maintained ranges overlapping with ≤ 1 resident male). Individual marten in the industrial forests maintained levels of performance similar to the unharvested reserve by positioning their territories in areas with proportionally more residual, mature forest than was available in the landscapes (Chapter 3), by avoiding early successional stands within their home ranges (Chapter 3), and by concentrating their activities in areas with abundant vertical and horizontal forest structure (Chapter 1).

Although the performance of individual females did not differ between forest-management treatments, density of lactating females was 3x greater in the reserve than in either industrial-forest treatment. Therefore, productivity of the forest reserve was greater than either the trapped or untrapped industrial-forest treatments because clearcutting reduced availability of suitable habitat. Higher fur-trapping pressure than I observed could potentially cause further reductions in population-level performance if trapping mortality of adult females reaches additive levels in landscapes with extensive clearcutting. Further research is needed to quantify the influence of forest fragmentation on marten performance in an untrapped, high-density population in an area with extensive clearcutting, and to evaluate habitat selection and demography of marten in areas where partial overstory removal is the predominant silvicultural practice.

CONCLUSIONS

Extensive clearcutting in the industrial-forest treatments lowered the carrying capacity of those landscapes for marten relative to the reserve, and trapping further reduced marten density in the trapped industrial forest through additive mortality of males. I did not observe differences in natural-mortality rates or incidence of lactation between the reserve and the industrial-forest treatments, however, indicating that individual marten maintained similar levels of performance regardless of the timber harvesting or trapping scenario. Marten in the industrial-forest treatments avoided predators, ensured access to habitat with preferred prey (Lachowski 1997), and maintained high levels of individual performance by: (1) positioning their home ranges in

areas with proportionally more residual, mature forest than was available at the landscape scale (Chapter 3); (2) by avoiding early successional stands within their home ranges (Chapter 3); and (3) by concentrating their activities in areas with abundant vertical and horizontal forest structure (Chapter 1).

I observed annual fluctuations in marten density, especially among yearlings. Yearling density reached a simultaneous low during 1997 in all 3 forest-management treatments. This followed a decline in populations of preferred small-mammal prey species during 1996 (Lachowski 1997), consistent with the hypothesis that marten populations at intermediate or greater densities are regulated by food availability (Powell 1994). There was no corresponding decline in the incidence of lactation among adult females, suggesting that changes in juvenile survival and recruitment were responsible for prey-mediated population regulation.

Although males tended to be younger in the industrial-forest treatments than in the reserve, there was no difference in female age structure among treatments. Trapping mortality was greater for males than for females in the trapped industrial forest, and removal of adult males caused the trapped population to be dominated by younger, immigrating individuals. The expanding population in the untrapped industrial forest was also characterized by young males, but the age structure was shifting during the study to become more similar to the reserve. Similar female age structures across treatments supports the hypotheses that females in high-density populations experience greater rates of natural mortality (Hodgman et al. 1997) and are more likely to disperse from established ranges in response to social stress or resource limitations (Phillips et al. 1998) than males. The male-biased sex ratio in the reserve adds further support to these hypotheses.

The incidence of breeding opportunities for females (i.e., intersexual home-range overlap) was similarly high in all forest-management treatments and did not differ between yearlings and adults, consistent with my observation of similar lactation rates across treatments and age classes. In contrast, a lower proportion of males maintained ranges that overlapped with ≥ 1 female in the trapped than in the untrapped industrial forest. Because males have larger territories than females (Buskirk and McDonald 1989) and marten are intrasexually territorial (Powell 1979, Katnik et al. 1994), some males in low-density populations will maintain ranges that don't provide breeding opportunities in a given year. My data suggest that young, immigrating males may be disproportionately excluded from breeding opportunities under these circumstances, and that there may be surplus numbers of potential mates for females in moderately trapped populations of marten in harvested landscapes. Surplus numbers of males, coupled with larger territories among males than females and a polygynous breeding system, reduce the potential for availability of breeding males to be limiting in moderately trapped populations.

Despite indications that the performance (i.e., survival and reproduction) of individual females did not differ between forest-management treatments, population-level performance (i.e., density of lactating females) was substantially greater in the reserve than in either industrial-forest treatment. This was attributable to reduced density of marten in the harvested landscapes; no other demographic parameters of females changed in response to timber harvesting or trapping. In the trapped industrial forest, greater trapping pressure than I observed (e.g., Hodgman et al. 1994) could have caused greater reductions in the density of adult females (Phillips 1994). Under these conditions, trapping and timber harvesting could have additive effects that reduce the viability of marten populations in human-altered landscapes.

MANAGEMENT IMPLICATIONS

Marten in a landscape characterized by extensive clearcutting and early successional stands ≤ 23 years old maintained levels of individual performance (i.e., survival and incidence of reproduction) comparable to marten in an unharvested area. Marten in the harvested landscape met energetic needs, minimized risk of predation, and ensured reproductive opportunities by positioning their home ranges in areas with proportionally more mature, structurally complex forest than was available in the landscape, by avoiding early successional stands within their home ranges, and by concentrating their activities in areas with abundant vertical and horizontal forest structure.

Timber harvesting decreased the density of marten in the industrial-forest landscapes because marten avoided regenerating clearcuts at the landscape scale. Although female age structure did not differ among forest-management treatments, the density of lactating female marten was 3x greater in the harvested landscape than in the unharvested areas. Therefore, extensive clearcutting caused reduced population-level productivity by reducing landscape carrying capacity. In contrast to the conclusions of previous researchers (Thompson 1994, Potvin and Breton 1997), other demographic parameters (e.g., natural-mortality rate, female age structure, incidence of lactation among adults) were not affected by timber harvesting.

Trapping further reduced marten density in the trapped industrial forest relative to the untrapped industrial forest, apparently through additive mortality of males. This did not cause a corresponding decline in population-level productivity (i.e., density of lactating females) within the trapped area because males maintained larger home ranges than females, but males and females selected similar habitats at the scale of the landscape. Therefore, there were surplus males in the industrial-forest treatments, which ensured breeding opportunities for females across a range of male densities. Higher fur-trapping mortality than I observed (e.g., Hodgman et al. 1994) could have further reduced the density of adult females in the trapped area (Phillips 1994), resulting in lower population-level productivity.

Only 17% of 130 marten territories in the managed landscapes were composed of $> 40\%$ early successional forest (< 6 m tree height) regenerated by clearcutting (Chapter 3). Reproductive success, and possibly survival and site fidelity, may decline when young forest comprises a higher proportion of the home range. This study did not address the size and distribution of residual, mature-forest patches, however. These landscape characteristics affect patterns of habitat occupancy by marten (Hargis and Bissonette 1997, Chapin et al. 1998), and may affect demographic performance. Habitat associations and performance of marten in relation to fragmentation (i.e., patch size and isolation) has not been studied in an untrapped marten population near carrying capacity. I recommend that further research be undertaken to quantify the influence of the size and distribution of residual forest patches on patterns of spatial use, survival, and productivity of marten in a high-density population within an extensively clearcut landscape.

My study documented marten-habitat associations and demographic performance in relation to clearcut harvesting. Partial overstory removal may mimic some forms of natural disturbance (e.g., insect defoliation; Chapter 2) and may allow maintenance of marten densities comparable to unharvested forests (Soutiere 1979). Further, partial harvesting is becoming the dominant form of forest management within the range of marten in the northeastern U.S. (Maine Forest Service 1998), although the effects of partial harvesting on marten performance have not been quantified. Future research should focus on habitat selection and demography of marten in relation to various intensities of partial forest harvesting.

**FOOD HABITS OF SPLAKE (*SALVELINUS NAMAYCUSH* X *S. FONTINALIS*)
IN THE PRESENCE AND ABSENCE OF LANDLOCKED SALMON (*SALMO*
SALAR): ASSESSMENT OF POTENTIAL COMPETITION**

By Thomas A. Hoffman

Thesis Advisor: Dr. John R. Moring

An Abstract of the Thesis Presented
in Partial Fulfillment of the Requirements for the
Degree of Master of Science
(in Zoology)
May, 2000

Food habits of splake (*Salvelinus namaycush* x *S. fontinalis*) were examined in three lakes in central Maine to determine potential resource competition with landlocked salmon (*Salmo salar*). An allopatric population of splake and two populations of splake sympatric with salmon were sampled to investigate shifts in diet due to competition. Both splake and salmon were sampled using day and night gill net sets, trap nets, angling, and creel surveys. Sampling occurred in 1998 and 1999. Fishes in the stomach contents were identified to species and invertebrates were identified to family. Percent index of relative importance, percent similarity, diet diversity, and diet breadth were calculated to determine competition for food resources. Fishes (85.4%) were the most important food item in the overall diet of allopatric splake and in the summer (59.2%) and fall (97.9%) diets. Common shiners were the dominant fish species in the overall diet (64.6%) and in the fall (88.3%), while threespine sticklebacks were the most important identifiable fish species in the summer (29.0%). Aquatic invertebrates (45.7%) were the most important food item for allopatric splake in the spring. Dipterans (68.0%) were the dominant order in the spring and were represented almost exclusively by the family Chironomidae

(99.3%). Fishes (63.3%) were the dominant food item in the overall diet of splake sympatric with salmon, with rainbow smelt (94.12%) the only identifiable fish species. Summer was the only season with enough samples to separate from the overall diet for sympatric splake and salmon. Fishes (78.6%) were the dominant food item for sympatric splake in the summer, again with rainbow smelt (90.2%) the only identifiable species. Fishes (77.5%) were also the dominant food item for salmon sympatric with splake, with rainbow smelt (98.6%) the only identifiable fish species. In the summer, fishes (67.3%) were the dominant food item, with rainbow smelt (95.9%) the only identifiable fish. There was high overlap in diet (>79%) for all food categories of sympatric splake and salmon. Percent similarity also was calculated for allopatric and sympatric splake. There was high overlap (92.9%) for general food categories, but not for fishes (14.5%) or invertebrate orders (51.1%). Diet diversity and diet breadth were calculated for allopatric splake (1.69, 0.31), sympatric splake (0.47, 1.24), and sympatric salmon (0.65, 1.58). This indicates that splake show a more diverse diet when salmon are not present. An analysis of variance was performed on length of salmon before and after the introduction of splake and age III and IV salmon were significantly longer after the introduction of splake.

PROGRESS REPORT
to the Scientific Research Review Subcommittee
Baxter State Park

Introduction of Orono sedge in the S.F.M.A.

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21 Sept 1999

Overview of project: To better understand colonization dynamics of Maine's only known endemic plant species, Orono sedge (*Carex oronensis*, Cyperaceae), along logging roads, I planted ten individuals in the Scientific Forest Management Area (SFMA) in June 1993. Field checks have been conducted every other year since 1994. 1998 was the first year in which additional Orono sedge plants, recruits, were found at the study site.

Background: Orono sedge is a wind-pollinated herbaceous perennial that flowers in June and ripens its seeds in early July. Seeds fall near the plant or are moved to other areas in hay. Plants can be identified when they have ripening or fully ripe fruits, called perigynia, on them; vegetative plants cannot be reliably separated from related species. This is a morphologically distinct species, is fertile, and has a well-defined geographical distribution (Dibble 1991, and Dibble and Campbell, submitted to Systematic Botany). It colonizes disturbed habitats such as roadsides, rivershore, hayfields, and woods roads, but we do not know the rate at which a population establishes and spreads, or longevity of a single individual, or persistence time for a population. Of the 2862 known individuals in 58 sites, all in Maine, more than half were found in 1992 in a single site on private land in Orono. Most sites, including the large Orono population, are not protected by a conservation easement or other mechanism. Populations are typically small, with fewer than 20 individuals; only four populations have more than 100 plants. Orono sedge was a candidate for listing on the Federal Register of Endangered and Threatened Plant Species but in February 1996 Congress voted to eliminate the candidate category. At the state level, Orono sedge is Threatened, not Endangered, because of the total number of individuals and populations known.

The SFMA is an ideal study site for this long term experiment because (a) a natural population of Orono sedge grows at Trout Brook Farm, thus we are not introducing a new species to the Park, (b) SFMA management is

consistent with the conservation and monitoring of this rare plant, and (c) SFMA ownership is stable.

The ten original plants introduced in the SFMA in 1993 are intended as seed sources in a replicated experiment. There are ten different locations along the road system north of Webster Stream. Field checks were conducted in 1994, 1996, and 1998. In the first few years of the study, no recruits of Orono sedge could be found near the original plants.

Results from 1998: On July 10, 1998 six of the ten original plants were alive and had a total of 43 fertile culms. There were 16 recruits with a total of 217 fertile culms (average 13.56, range 1-49). One of these new plants was near a parent that had died. A few agricultural weeds introduced in the compost in 1993, including the Eurasian cow vetch (*Vicia cracca*), persisted with the Orono sedge plants. I pulled these out, as I had done in 1994 and 1996. The four original plants that died since 1993 might have done so because the soils in which I planted them lack organic matter or are subsoil. Without sufficient moisture-holding capacity, ability to resist a summer drought could be low. Or these plants could have succumbed to frost heaving. I checked the Trout Brook Farm population on July 10, 1998 and found 12 plants. Population size is the same there as when I first found the population on July 6, 1988. I do not know if these are the same 12 plants.

Future monitoring: In July 2000 I plan to replace the old markings on the original plants. Ideally, for detailed demographic study each of the recruits would be marked with a permanent tag, but some recruits are at the edge of the road where vehicles pass regularly and their tags would likely be lost. For these few plants I will instead measure distance from the parent and determine coordinates to develop a map.

Recommendations: The management plan for the SFMA accomodates this experiment and provides an abundance of suitable habitat. Baxter State Park can continue to be in communication with the Maine Natural Areas Program regarding this species, as the Trout Brook site is one of very few under protection anywhere in the world.

References cited

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Observer Copy

Breeding Bird Survey - Route Summary Report

Route: 44050 HORSE MTN Observer: T0179TUDOR, LINDSAY

Survey Date: 06/22/1999 Time Start: 0410 Time End: 0914

Start Temp.: 60 End Temp.: 073 Temp. Scale: F

Start Wind: 0 End Wind: 1

Start Sky: 0 End Sky: 0

Species	1-10	11-20	21-30	31-40	41-50	Total Ind.	T
Common Loon	0	1	0	0	0	1	1
Northern Saw-whet Owl	1	0	0	0	0	1	1
Yellow-bellied Sapsucker	4	4	2	0	0	10	9
Yellow-shafted Flicker	0	0	0	1	0	1	1
Pileated Woodpecker	1	1	0	0	0	2	2
Eastern Wood-Pewee	0	0	1	0	0	1	1
Alder Flycatcher	1	0	0	0	0	1	1
Least Flycatcher	3	4	1	2	0	10	8
Blue-headed Vireo	1	3	1	3	0	8	8
Red-eyed Vireo	5	9	5	2	4	25	2
Blue Jay	0	0	0	1	0	1	1
American Crow	0	1	0	0	0	1	1
Common Raven	2	2	2	0	0	6	4
Tree Swallow	0	1	0	0	0	1	1
Barn Swallow	0	0	4	0	0	4	1
Black-capped Chickadee	0	1	1	1	2	5	5
Red-breasted Nuthatch	2	2	0	1	2	7	7
Winter Wren	4	2	4	3	2	15	1
Golden-crowned Kinglet	0	0	1	0	2	3	3
Veery	5	1	3	0	1	10	8
Swainson's Thrush	1	0	1	3	1	6	5
Hermit Thrush	1	2	6	2	2	13	1
Wood Thrush	2	0	0	0	2	4	4
American Robin	5	8	3	3	2	21	1
Cedar Waxwing	0	3	1	2	1	7	4
Nashville Warbler	0	0	2	1	0	3	3
Northern Parula	3	5	1	3	3	15	1
Chestnut-sided Warbler	0	0	0	0	1	1	1
Magnolia Warbler	2	2	3	1	2	10	1
Black-throated Blue Warbler	1	2	2	1	1	7	6
Myrtle Warbler	1	1	0	2	3	7	6
Black-throated Green Warbler	0	0	2	2	0	4	4
Blackburnian Warbler	0	0	1	1	0	2	2
Bay-breasted Warbler	1	0	0	0	0	1	1
Black-and-white Warbler	0	2	0	2	0	4	4
American Redstart	3	2	3	4	2	14	1
Ovenbird	7	7	6	5	6	31	2
Northern Waterthrush	0	1	1	2	0	4	3
Common Yellowthroat	0	0	0	1	0	1	1
Canada Warbler	1	0	0	1	0	2	2
Scarlet Tanager	1	0	1	0	0	2	2
Chipping Sparrow	0	0	1	0	0	1	1
Song Sparrow	0	1	0	0	0	1	1
White-throated Sparrow	2	3	4	4	5	18	1
Slate-colored Junco	0	0	0	1	0	1	1
Rose-breasted Grosbeak	0	0	0	0	2	2	2
Purple Finch	0	0	0	1	0	1	1
Evening Grosbeak	0	0	6	0	0	6	2

Total Species: 48 Total Ind: 302

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October 25, 1999

Irvin C. Caverly, Jr., Director
Baxter State Park Authority
64 Balsam Drive
Millinocket, ME 04462

Dear Irvin:

Thank you very much for your support on the Wassataquoik Watershed Study. The housing and general working conditions were significantly better than I anticipated. The support that I received from Baxter Park personnel was superlative. You have one of the finest groups of professionals with which I have had the privilege of working. I am especially appreciative for all of the helpful advice and assistance from Chris Drew, Jean Hoekwater, Brendan Curran, Dan Randall, and Stuart Guay. It is great to see that this beautiful place continues to be managed to preserve and protect Governor Baxter's gift to all that visit.

This summers fieldwork was a great success. I conducted 100 User Survey interviews; collected approximately 212 voluntary fishing survey cards; and obtained age and growth information from 55 fish. My report will contain details from this data and will be delivered to Jean Hoekwater by May 1, 1999.

Thanks to your support, we will learn more about the unique and complex interactions that occur in this natural area. I hope that you will support future research that will aid in understand this unique region of Maine. Your wise management has had positive implications that will facilitate a greater knowledge of the various natural and human dynamics which affect Baxter Park. By learning more about these dynamics, we can better protect Baxter Park so that it will be available for all to enjoy far into the next millennia, as Governor Baxter had envisioned.

Sincerely,



Jason R. Saucier

Cc: Chris Drew, Jean Hoekwater

Microsatellite gene diversity analysis

in landlocked Arctic charr, *Salvelinus alpinus*, from Maine, USA

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Abstract

We performed a gene diversity analysis at six microsatellite loci of lacustrine Arctic charr (*Salvelinus alpinus*) from all twelve lakes harboring the Laurentian evolutionary lineage in Maine, USA. More specifically, we revisited the hypotheses based on previous analyses with other markers that i) silver charr from Floods Pond represent a distinct evolutionary lineage, and ii) all other charr populations from Maine should be considered as genetically identical, and consequently as replicate of a single evolutionary group. The high level of polymorphism observed at microsatellite loci contrasted sharply with the extremely reduced levels of variation previously reported at other markers. All analyses confirmed that the 12 lakes harbor genetically distinct populations among which gene flow remained restricted and on which other evolutionary forces may independently be acting to enhance their genetic divergence. However, hierarchical gene diversity, population clustering, and population assignment analyses, all indicated that populations from different drainages did not originate from genetically distinct ancestral population assemblages. Globally, our results contradict previous conclusions that the silver charr from Floods Pond originated from an evolutionary distinct lineage, and that all blueback charr populations may be viewed as genetically homogeneous, not warranting individual protection. We discussed the implications of these findings for the management and conservation of these unique Arctic charr populations.

Introduction

The Arctic charr, *Salvelinus alpinus* L., has a holarctic distribution and exhibits a complex pattern of variability in morphology, coloration, ecology, and life-history traits (reviewed in Behnke, 1972; Johnson, 1980). The contemporary distribution, diversity, and population structure of Arctic charr have been molded by repeated glacial advances and retreats during the Pleistocene as they have with other north temperate freshwater fishes. A recent phylogeographic survey, based upon analysis of mitochondrial variation, revealed that, in North America, these historic events have led to the evolution of three major evolutionary lineages of Arctic charr that are largely allopatric in distribution (Wilson *et al.*, 1996). One of these, the so-called Laurentian lineage, likely dispersed from a currently submerged Atlantic coastal refuge and is mainly composed of landlocked populations that became isolated from the sea during the last glacial retreat and includes populations from southeast Québec, New Brunswick and northeastern United States (Wilson *et al.*, 1996). Based on unique phenotypes and morphological differences from Arctic charr in Labrador and Newfoundland, these landlocked populations have been recognized as a distinct subspecies, *S. alpinus oquassa* (Qadri, 1974).

The landlocked Arctic charr is very intolerant of environmental disturbance, and consequently, many populations have become extinct due to either competition from human-introduced fish or human-induced environmental changes (reviewed in Kircheis, 1989). Maine is now the only region in the United States that still retains relict populations of the Laurentian evolutionary lineage of Arctic charr. Only twelve lakes, scattered in three major watersheds, are known to harbor Arctic charr populations in Maine. Based upon its unique breeding color and other external phenotypic traits, the charr population of Floods Pond, has been recognized as a distinct entity, the silver charr, or the Sunapee (Kircheis, 1989). Other populations, known locally as blueback charr, are all located in remote unpopulated areas of the state. Floods Pond, however, is the main source for

domestic water in an area of very rapid human population growth, and consequently, the long-term survival of charr population in this lake may be threatened by periodical lowering of water levels (Kircheis, 1989). Recent successes with artificial spawning habitats in Floods Pond have mitigated some of these concerns (Kircheis, unpublished data).

Degree of genetic uniqueness is now widely applied as a major criterion to be considered when justifying protection, from a conservation perspective, of distinct populations (Bernatchez, 1995; Waples, 1995; Petit *et al.*, 1998). Limited information on genetic relationships among Maine charr populations is available. Studies at seven slightly polymorphic enzymatic loci revealed an almost complete genetic identity among four Maine populations (including those from Floods Pond) and a few others from elsewhere (Kornfield *et al.*, 1981). The analysis of mtDNA variation basically led to the same results, except that a unique, slightly divergent haplotype characterized the charr from Floods Pond (Kornfield & Kircheis, 1994). This led the authors to conclude that preservation of the so called silver charr was warranted on genetic grounds, whereas all other populations might be viewed as genetically homogeneous, and do not warrant individual protection based upon genetic characterizations. Extremely reduced allozyme and mtDNA polymorphism is, however, a common feature of Arctic charr throughout its range (reviewed in Brunner *et al.*, 1998). This may have generally hampered the usefulness of those markers to reliably characterize the genetic structure of Arctic charr populations at a scale finer than glacial races. It may thus be hazardous to equate the apparent homogeneity observed at these markers with an absence of genetic distinction among populations that are physically isolated in different waters.

Microsatellites are a class of highly polymorphic nuclear loci that are receiving increasing attention (Estoup & Angers, 1998). The usefulness of these markers for addressing fine-scale population structure has been demonstrated in brook charr, *Salvelinus fontinalis* (Angers & Bernatchez, 1998). More recently, the use of microsatellites in Arctic charr resolved population

structure on small geographic scales where other markers had failed to detect significant partitioning of genetic diversity (Brünner *et al.*, 1998; Bernatchez *et al.*, 1998). In this study, we performed a gene diversity analysis among all relict populations of lacustrine Arctic charr from Maine to revisit the hypotheses that i) charr from Floods Pond represent a distinct evolutionary lineage, and ii) all other charr populations from Maine should be considered as genetically identical, and consequently as replicate of a single evolutionary group.

“Microsatellite Gene Diversity Analysis in Landlocked Arctic Charr, Salvelinus alpinus, from Maine, USA” by Bernatchez, Rhydderch and Kircheis, con't ...

Implications for conservation and management

Our results, in complement with previous studies, have several implications for the conservation and management of Arctic charr in Maine. First, results of microsatellite are compatible with mtDNA studies in indicating that all populations from Maine belong to the single Laurentian evolutionary lineage that evolved independently from all other Arctic charr evolutionary groups found elsewhere within the United States (Wilson *et al.*, 1996; Brunner, 1997). As such, Arctic charr from Maine should be considered as a whole as a distinct Evolutionary Significant Unit (ESU, *sensu* Moritz, 1994) within this country. Second, the previous conclusion of Kornfield & Kircheis, (1994) that all blueback charr populations may be viewed as genetically homogeneous, not warranting individual protection, needs to be revisited. In contrast, our results indicated that evolutionary forces acting independently on Arctic charr from different lakes led to the evolution of a unique genetic composition for most populations. Admittedly, this conclusion must be taken cautiously since it is derived from patterns observed at neutral loci, and some samples were very limited in size. Yet, the observation that several of those populations have evolved distinctive phenotypes is suggestive that these populations may also have evolved independent and unique adaptations. For example, the dwarf charr found in Green Lake (Kircheis, 1985) have adapted to a benthic, very deep (> 60 m) environment where they spawn in mid-summer, while those in Wadleigh Pond thrive in a shallow (approximately 15 m) lake where they lead a pelagic life style and spawn in late fall. The small, silvery charr in Wassataquoik Lake contrast sharply with similar size charr in Big Black Pond where the bright orange spawning colors are retained in the paired fins all year. Thus, every single Arctic charr populations from Maine should be treated as an important management unit in its own right,

and State of Maine fisheries managers should continue to do what is necessary to protect and conserve these populations from genetic degradation, excessive competition, and/or over fishing (Kircheis, 1981; 1989). Such a conservative approach is also justified by the fact that they represent the only populations of the Laurentian lineage in the United States that avoided extirpation thus far. However, because no one population stands out as being highly distinct from any other, or belongs to a distinct evolutionary group, no single population should require special protection based on its genetic makeup alone. This particularly applies to the silver charr from Floods Pond, previously believed to be evolutionarily unique. In such a case, the decision of giving priority for protection should rather be based on the levels of threat from human impacts (Bernatchez, 1995). Because it is the main source for domestic water in an area of very rapid human population growth, the long-term survival of the silver charr population from Floods Pond may be more threatened than for any other populations in Maine, and as such, may deserve priority for protection.

Based on the belief that this population represented a evolutionarily unique lineage, the Maine Charr Management Plan required the establishment of five new populations of silver charr from Floods Pond. However, this may not be warranted since both the genetic and phenotypic uniqueness of that population is most likely the product of local genetic drift and adaptation. It is thus likely charr from Floods Pond that would be transplanted in other lakes will evolve away from their founding population by the same processes. In this context, it appears more that the most rational approach to ensure the conservation of the genetic integrity of the silver charr is to prevent demographic decline in Floods Pond rather than dispersing it in other lakes.

E. ADMINISTRATIVE SERVICES

I PERSONNEL

Resignations due to retirement or the opportunity for full-time employment always results in transfers within the Park and eventually opportunities for new hires.

Resignations:

Dan Anderson - Campground Attendant - So. Branch Pond
Colleen Burgess - Gatehouse Attendant - Togue Pond
Malcolm W. Coulter, Jr. - Business Manager - Millinocket Hdqtrs.
Ed Cunningham - Trail Crew Leader
Ron Freelove - Gatehouse Attendant (Acting Capacity) - Togue Pond
Charles James - Campground Attendant (Acting Capacity) - So. Branch Pond
Ann Loyd - Naturalist Assistant
Christian McGinn - Campground Attendant - Katahdin Stream
Dan Randall - Campground Attendant - Russell Pond
Nicolas Rogers - Trail Crew Leader
Bryan Swenson - Forestry Aide - SFMA

Transfers:

Dan Andersen - Campground Ranger I - Trout Brook Farm
Elizabeth Johnston - Business Manager - Millinocket Hdqtrs.
Tom Lohnes - Campground Ranger I - Abol
Michael Martin - Campground Attendant - Nesowadnehunk
Sara McBride - Campground Attendant - Katahdin Stream
Rachel Ste. Croix - Accounts Clerk II (Acting Capacity) - Millinocket Hdqtrs.

New Hires:

Dan Anderson - Campground Attendant - So. Branch Pond
Colleen Burgess - Gatehouse Attendant - Togue Pond
Jason Cooke - Forestry Aide - SFMA
Eric Cookson - CRI - Daicey/Kidney Pond
Ron Freelove - Gatehouse Attendant - Togue Pond
Charles James - Campground Attendant (Acting Capacity) - So. Branch Pond
Alisa MacArthur - Clerk II (Project Position) - Visitor Center
Margaret Ounsworth - Naturalist Assistant
Verda Peabody - Clerk II (Project Position) - Visitor Center
Alana Reid - Trail Crew Leader (Acting Capacity)
Simone Rossignol - Gatehouse Attendant (Acting Capacity) - Togue Pond
Paul Sannicandro - Campground Attendant - So. Branch Pond
Rachel Ste. Croix - Gatehouse Attendant - Togue Pond
Kristy Trainor - Gatehouse Attendant - Togue Pond
Alan Watson - Trail Crew Leader

II TRAINING

JUNE - Solo Wilderness Medicine - CA's, CRI's,
Bloodborne Pathogens - CA's, CRI's
Chainsaw Safety - CA's, CRI's, Trail Crew
Advanced Chainsaw Safety - CRI's, BSP Ranger I and II's
Adm. Staff

III DONATION ACCOUNT

As of December 31, 1998, the balance of the Donation Account was \$3,550.50. The following purchases were made:

2 Old Town Discovery Canoes	\$739.00
Digital Camera for I&E	663.85

The amount of \$3000 was transferred to the BSP checking account to be used at a later date by the Park Naturalist in the I&E program. This money is for BSP's part in donation for making a *Leave No Trace* video.

DONATIONS FOR 1999

BSP Check	\$120.01
(Money lost & found \$110.01/Peter Cooley \$10.00)	
BSP Check	\$ 43.00
BSP Check	\$227.00
Kathryn Kurz	\$ 75.00
BSP Check	\$ 40.00
Anonymous	\$249.00
Anonymous	\$249.00
BSP Check	\$ 72.00
Easton Trail Breakers	\$100.00
Brewer Garden & Bird Club	\$ 25.00
Penobscot County Conservation Assoc.	\$150.00
BSP Check	\$ 37.75
Michael Perry	\$ 25.00
Robert Tice	\$ 25.00
Laurence Lovejoy	\$ 25.00
David DeLuca	\$ 25.00

Mark A Sairio	\$ 25.00
Marie Mitchell	\$ 50.00
Mrs. Lou Ceil Hopkins	
Mr. Mark Hopkins	
BSP Check	\$106.12
BSP Check	\$125.05
Carroll J. & Josephine Andre	\$ 50.00
William McGuinn, Jr.	\$100.00

IV 1999 RESERVATION OFFICE

The Reservation Office job responsibilities includes processing summer and winter reservation for the entire Park both in person, by mail and over the radio; information and education provided to the visitor; providing two-way radio communications; receiving and processing fees, cash-up; recording the weather daily, maintaining the radio log, providing information for numerous phone calls and filing.

This year, physical changes were made to the office making the office more convenient for the employees and creating a warmer atmosphere welcoming the many visitors to Headquarters. The office walls have been papered, a new cabinet has been built to hold re-saleable items, two smaller cabinets have been added to the office for supplies and there is a new information display in the lobby for visitor use.

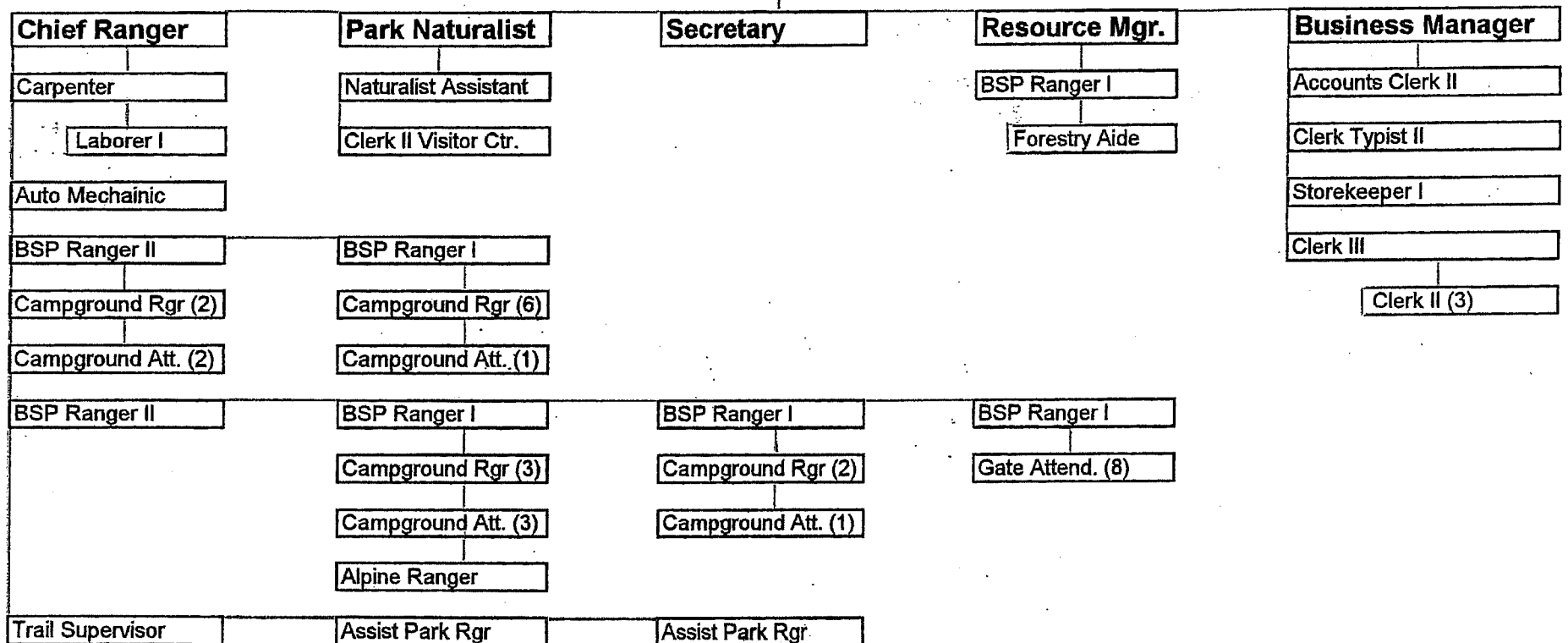
Reservation staff had personal contact with over 34,000 people this year. The Reservations computer database now holds both winter and summer reservation information. Visa/Master Card credit cards are now accepted for reservations made in person or by mail. Parking reservations can now be made for parking spaces for the trail-heads to Katahdin.

The following is statistical information for the 1999 season:

	<u>Telephone Calls</u>	<u>Office Visitors</u>	<u>Letters Mailed</u>	<u>Information Packets Sent</u>	<u>Video Shown</u>
January	2,085.00	866.00	1,004.00	489.00	
February	2,314.00	356.00	1,409.00	321.00	5.00
March	1,830.00	296.00	1,062.00	368.00	
April	1,509.00	202.00	497.00	408.00	38.00
May	2,297.00	627.00	628.00	439.00	35.00
June	3,198.00	1,170.00	699.00	464.00	90.00
July	3,512.00	1,787.00	637.00	461.00	128.00
August	3,337.00	2,254.00	762.00	364.00	213.00
September	2,483.00	1,443.00	397.00	251.00	144.00
October	975.00	518.00	77.00	103.00	52.00
November	403.00	124.00	53.00	122.00	1.00
December	<u>1,002.00</u>	<u>87.00</u>	<u>27.00</u>	<u>290.00</u>	<u>1.00</u>
Totals	<u>24,945.00</u>	<u>9,730.00</u>	<u>7,252.00</u>	<u>4,080.00</u>	<u>707.00</u>

BAXTER STATE PARK AUTHORITY
Attorney General
Commissioner, Inland Fisheries & Wildlife
Director, Maine Forest Service

DIRECTOR



YEAR-ROUND POSITIONS - 1999

<u>Title/ Position Number:</u>	<u>Name:</u>	<u>Location:</u>
BSP Director 9429-0811	Irvin C. Caverly, Jr.	Headquarters, Mlkt.
BSP Chief Ranger 9428-0966	Chris M. Drew	Headquarters, Mlkt.
Forester II 9428-0968	D. Jensen Bissell	Headquarters, Mlkt.
Forest Technician 9456-0121	W. MacPerson Browning	Headquarters, Mlkt.
BSP Naturalist 9214-0947	Jean Hoekwater	Headquarters, Mlkt.
Sec. to Director 0005-0969	Roxanna McLean	Headquarters, Mlkt.
Bus. Mgr. I 0041-0985	Elizabeth Johnston	Headquarters
Acct. Clerk II 0312-1081	Rachel Ste.Croix	Headquarters, Mlkt.
Clerk Typist II 0012-0871	S. Jean Howes	Headquarters, Mlkt.
Storekeeper I 0231-0927	Rosemary James	Headquarters, Mlkt.
Clerk III 0003-0091	Mary Ellen Bell	Headquarters, Mlkt.
Auto Mechanic II 8303-0926	Timothy Sides	Headquarters, Mlkt.
Carpenter 8201-0041	Albert Rickards	Headquarters, Mlkt.
BSP Ranger II 9404-0946	Barry MacArthur	Field
9404-0945	Robert E. Howes	Field
BSP Ranger I 9434-0972	Thomas P. Chase	Field
9434-0944	Loren Goode	Field
9434-0943	Bernard Crabtree	Field
9434-0942	Charlie Kenney	Field
Trail Crew Supervisor 9435-0141	Lester Kenway	Field

SEASONAL POSITIONS – 1999

<u>Title/Position Number</u>	<u>Name/Location</u>	<u>Wks</u>	<u>Start</u>	<u>End</u>
CAMPGROUND RANGERS				
9425-0631	Mark Varney	-Nesowadnehunk	20	5-30 10-16
9425-0021	Brendan Curran	-Russell Pond	24	5-9 10-23
9425-0221	Keith Smith	-So. Branch Pond	24	5-9 10-23
9425-0351	Greg Hamer	-Chimney Pond	24	5-9 10-23
9425-0641	Stewart Guay	-Roaring Brook	24	5-9 10-23
9425-0601	Tom Lohnes	-Abol	24	5-9 10-23
9425-0391	Bruce White	-Katahdin Stream	29*	5-9 11-27
9425-0611	Dannie Andersen	-Trout Brook Farm	20	5-30 10-16
9425-0983	Joanna Thorpe	-Kidney Pond	25	5-2 10-23
9425-0982	Neal Sleeper	-Kidney Pond	25	5-2 10-23
9425-0980	Marcia Williamson	-Daicey Pond	25	5-2 10-23
9425-0981	Gabe Williamson	-Daicey Pond	25	5-2 10-23
9425-0986	Eric Cookson	-Daicey/Kidney Pond	25	5-2 10-23
CAMPGROUND ATTENDANTS				
9424-0841	Frank Taylor	-Chimney Pond	20	5-30 10-16
9424-0741	Kevin Donnell	-Roaring Brook	18	5-30 10-2
9424-0922	Dan Anderson	-So. Branch Pond	18	5-30 10-2
9424-0831	Dan Randall	-Russell Pond	20	5-30 10-16
9424-0421	Christian McGinn	-Katahdin Stream	18	5-30 10-2
9424-0461	Michael Martin	-Nesowadnehunk	14	5-16 8-21
9424-0978	Sara McBride	-Togue Pond	14	5-16 8-21
GATEHOUSE ATTENDANT				
9422-0171	Jennifer Hall	-Togue Pond	29*	5-9 11-27
9422-0511	Rachel Ste. Croix	-Togue Pond	23	5-9 10-16
9422-0361	Dana Miller	-Matagamon	23	5-9 11-27
9422-0441	Helen Wood	-Matagamon	29*	5-9 11-27
9422-0201	Ted Hanson	-Matagamon	29*	5-9 10-16
9422-0501	Diane Freelove	-Togue Pond	29*	5-9 11-27
9422-0531	Colleen Burgess	-Togue Pond	20	6-20 11-6
9422-0541	Kristy Trainor	-Togue Pond	12	6-20 9-11
TRAIL CREW				
9209-0940	Nikolas Rogers	-Trail Crew Leader	14	5-9 8-14
9209-0984	Edward Cunningham	-Trail Crew Leader	14	5-9 8-14
RESERVATION OFFICE				
0002-0731	Gladys Hanson	-Clerk II	40	1-4 10-9
0002-0941	Robin Burgess	-Clerk II	40	1-4 10-9
0002-0967	Connie Theriault	-Clerk II	40	1-4 10-9
VISITOR CENTER				
0002-0977	Nancy Moxley	-Clerk II	20	5-23 10-9
8001-0965	Adam Stanley	-Laborer I	14	5-23 8-28
9209-0988	Jason Cooke	-Forestry Aide	14	5-16 8-21
9425-0987	Meg Ounsworth	-Naturalist Assistant	18	5-23 9-25
9426-0979	Stewart Guay	-Winter Alpine Ranger	18	11-28 4-1-2000

*Extensions are weather related

Rev. 5/6/99

BAXTER STATE PARK

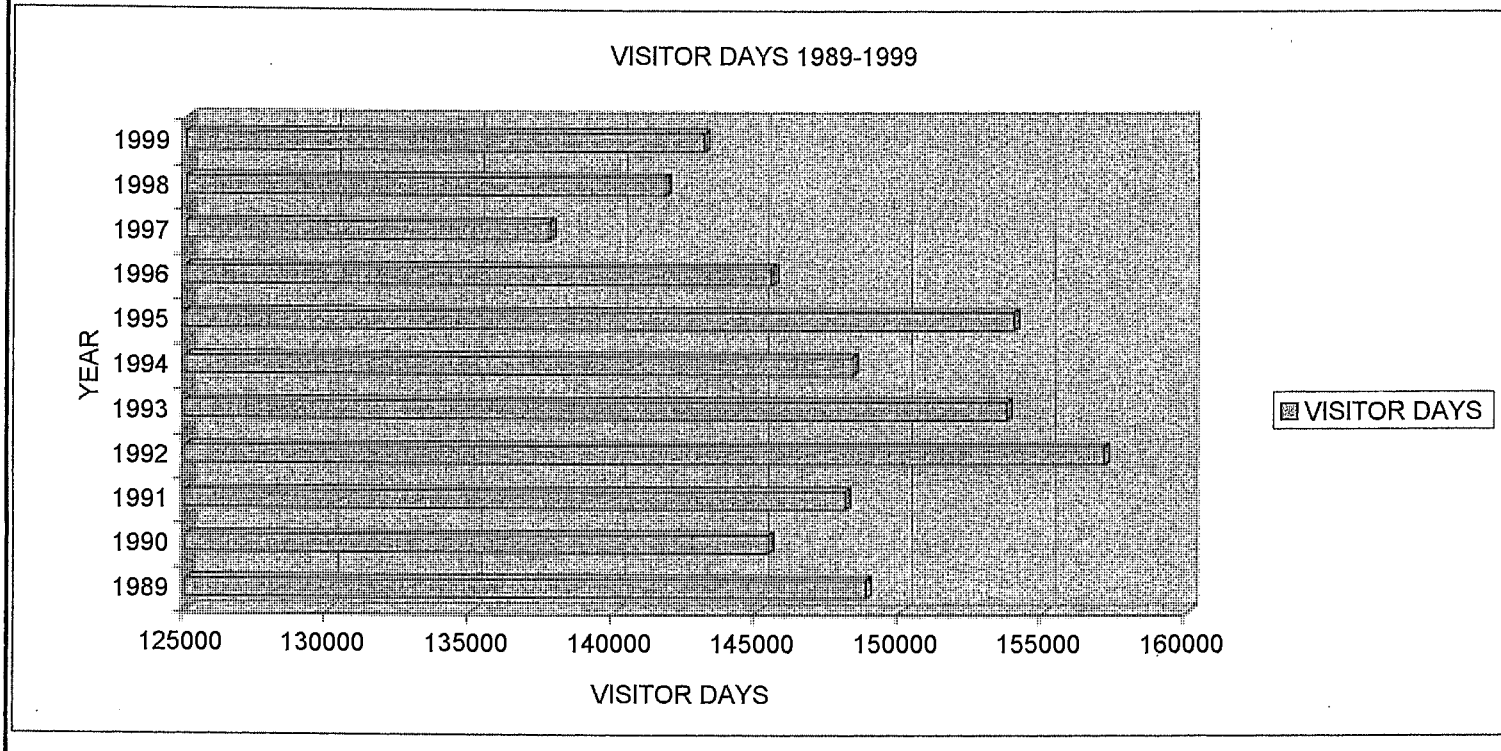
COMPARATIVE STATISTICS - VISITOR DAYS

1989 - 1999

VISITOR DAY* STATISTICS:	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
TOTAL SUMMER VISITOR DAYS	145667	142358	145046	154619	152133	146148	152281	143555	135924	139558	141196
TOTAL WINTER VISITOR DAYS	3109	2992	2992	2489	1554	2124	1660	1913	1750	2161	1888
TOTAL PARK VISITOR DAYS	148776	145350	148038	157108	153687	148272	153941	145468	137674	141719	143084

* Visitor day = camper days + gatehouse headcount
(a visitor staying in the park two nights would
spend three days in the park. Camper days
counts the nights in the Park, gatehouse
headcount adds the extra day.)

** Complete day use stats not available in 1992



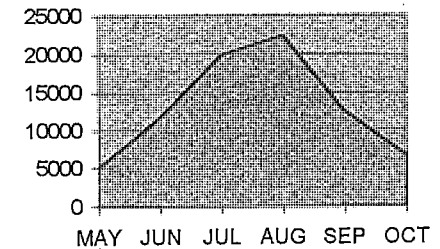
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BAXTER STATE PARK
1999 GATE COUNT/VEHICLE PER MONTH

	VEHICLES				% OF	TOTAL	AVE.
	RES	NON-RES	PASS	TOTAL	VEHICLES	PEOPLE/ MONTH**	PEOPLE/ VEHICLE
MAY							
Togue Pond	986	517	102	1605		3926	
Matagamon	383	68	0	451		1174	
Total MAY	1369	585	102	2056	7	5100	2.5
JUNE							
Togue Pond	2046	1565	37	3648		9889	
Matagamon	500	174	0	674		1867	
Total JUNE	2546	1739	37	4322	15	11756	2.7
JULY							
Togue Pond	2794	2704	44	5542		16204	
Matagamon	793	411	0	1204		3674	
Total JULY	3587	3115	44	6746	23	19878	2.9
AUGUST							
Togue Pond	2900	3681	34	6615		18904	
Matagamon	722	465	0	1187		3529	
Total AUGUST	3622	4146	34	7802	27	22433	2.9
SEPTEMBER							
Togue Pond	2073	2298	36	4407		10774	
Matagamon	393	295		688		1734	
Total SEPTEMBER	2466	2593	36	5095	18	12508	2.5
OCTOBER							
Togue Pond	1250	1361	17	2628		5796	
Matagamon	241	141	0	382		883	
Total OCTOBER	1491	1502	17	3010	10	6679	2.2
TOTAL BY	15081	13680	270				
USE CATEGORY				29031	100	78354	2.7
%BY CATEGORY	52%	47%	1%				

**See 1998 Gate Counts/People Per Month

PEOPLE PER MONTH - 1999



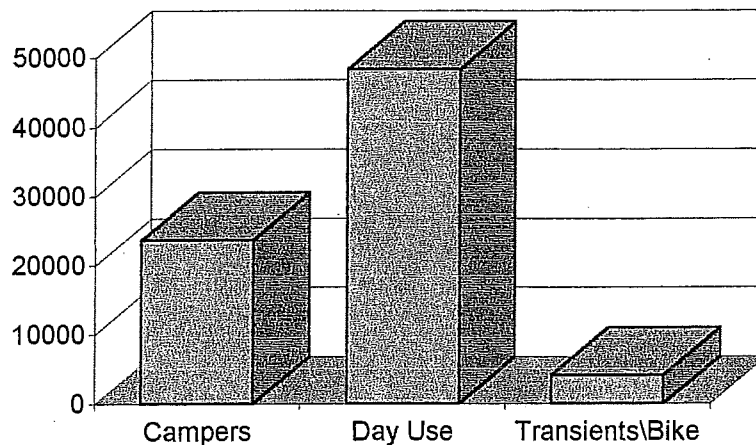
BAXTER STATE PARK
1999 GATE COUNTS - PEOPLE PER GATE

	CAMPERS			DAY USE			TRANSIENTS			WALK/ BIKE	TOTAL COUNT	% BY GATE
	RES	NON-RES	TOTAL	RES	NON-RES	TOTAL	RES	NON-RES	TOTAL			
TOGUE POND GATE												
May	507	506	1013	1941	767	2708	103	23	126	8	3855	
June	1783	1677	3460	3783	2367	6150	141	116	257	22	9889	
July	2742	2521	5263	5408	5037	10445	182	267	449	47	16204	
August	2530	2332	4862	5953	7621	13574	160	269	429	39	18904	
September	1666	1603	3269	3624	2460	6084	175	215	390	31	9774	
October	611	711	1322	2105	2012	4117	180	171	351	6	5796	
TOGUE TOTAL	9839	9350	19189	22814	20264	43078	941	1061	2002	153	64422	83%
MATAGAMON GATE												
May	201	48	249	773	112	885	28	4	32	8	1174	
June	323	99	422	1090	233	1323	74	47	121	1	1867	
July	870	415	1285	1545	650	2195	87	98	185	9	3674	
August	848	494	1342	1194	622	1816	159	208	367	4	3529	
September	419	233	652	518	291	809	106	165	271	2	1734	
October	82	48	130	284	123	407	197	149	346	0	883	
MATAGAMON TOTAL	2743	1337	4080	5404	2031	7435	651	671	1322	24	12861	17%
TOTAL GATES	12582	10687	23269	28218	22295	50513	1592	1732	3324	177	77283	

BAXTER STATE PARK
1999 GATE COUNTS/VEHICLE PER GATE

	VEHICLES				% OF
	RES	NON-RES	PASS	TOTAL	TOTAL
TOGUE POND GATE					
May	986	517	102	1605	
June	2046	1565	37	3648	
July	2794	2704	44	5542	
August	2900	3681	34	6615	
September	2073	2298	36	4407	
October	1250	1361	17	2628	
TOGUE TOTAL	12049	12126		24445	82
MATAGAMON GATE					
May	383	68	0	451	
June	500	174	0	674	
July	793	411	0	1878	
August	722	465	0	1187	
September	393	295	0	688	
October	241	141	0	382	
MATAGAMON TOTAL	3032	1554		5260	18
TOTAL GATES	15081	13680		29705	100

GATE HEADCOUNTS BY USE TYPE
1999



BAXTER STATE PARK**TRAIL USE SUMMARY -1999**

Registered hikes per person per trail

TRAIL USE-UNITS BY MONTH

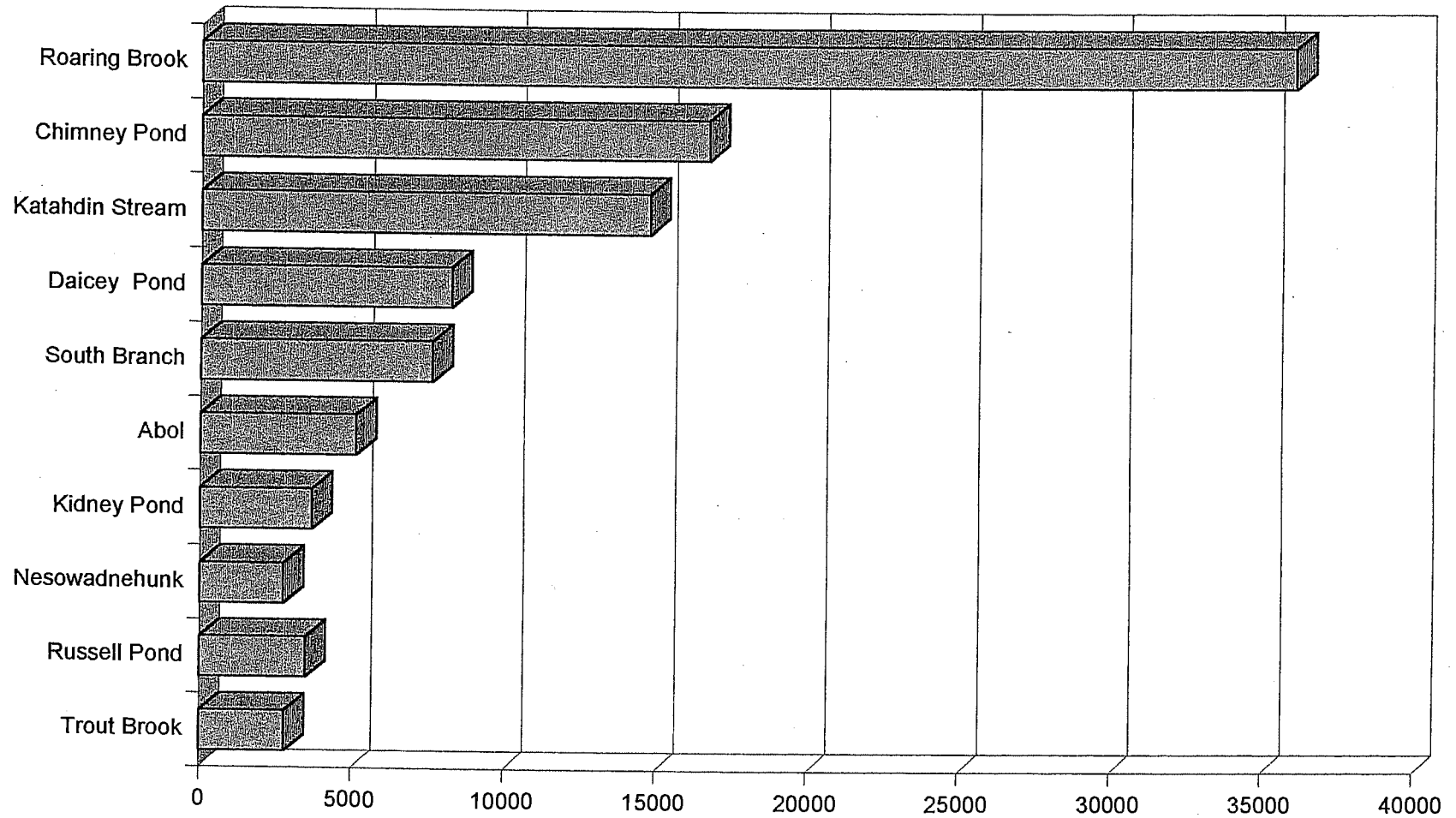
TRAIL NAME	MAY	JUN	JUL	AUG	SEPT	OCT	TRAIL TOTAL	AREA TOTAL	% OF TOTAL
KATAHDIN STREAM:									
Hunt	781	1498	2956	3566	1812	886	11499		
Owl	30	105	8	144	142	48	477		
Grassy Pond	108	260	612	677	328	226	2211		
O.J.I.	10	46	68	146	67	67	404		
A.T. South	24	95	32	20	8	3	182		
KATAHDIN TOTALS	953	2004	3676	4553	2357	1230		14773	15%
ABOL:									
Abol Trail	178	565	1340	1499	747	163	4492		
Abol Falls	18	83	155	200	121	65	642		
ABOL TOTALS	196	648	1495	1699	868	228		5134	5%
ROARING BROOK:									
Chimney	178	2931	4333	4745	2589	1295	16071		
Helon Taylor	133	971	1690	1554	975	181	5504		
Sandy Stream	625	1791	3116	2640	1734	1092	10998		
So. Turner	122	235	347	300	392	149	1545		
Russell Pond	61	259	392	361	238	147	1458		
Nature Trail	37	156	125	107	57	29	511		
RRG BK TOTALS	1156	6343	10003	9707	5985	2893		36087	36%
SOUTH BRANCH POND:									
So. Branch Falls	1	49	138	96	51	12	347		
Ledges	13	24	77	159	65	13	351		
Howe Brook	16	105	442	454	136	23	1176		
N. Traveler	26	144	266	368	128	74	1006		
Center Ridge	19	40	59	87	38	14	257		
So. Br. Mtn.	20	47	153	182	99	32	533		
Pogy Notch	157	351	1059	1207	471	144	3389		
Burnt Mtn.*	6	7	98	85	57	21	274		
Mid. Fowl. & Other	10	6	53	70	31	26	196		
Wadleigh Brook	11	9	14	17	34	16	101		
SO. BRNCH. TOTALS	279	782	2359	2725	1110	375		7630	7%
NESOWADNEHUNK:									
Double Top	30	106	287	401	287	104	1215		
Marston	9	106	260	383	227	97	1082		
Wass. Lake Trail	0	0	25	77	4	40	146		
Dwvley Trail	0	19	55	82	37	36	229		
Center Pond	0	28	38	12	0	5	83		
NESO. TOTALS	39	259	665	955	555	282		2755	3%

continued...

Registered hikes per person per trail, continued

TRAIL NAME	MAY	JUN	JUL	AUG	SEPT	OCT	TRAIL TOTAL	AREA TOTAL	% OF TOTAL
CHIMNEY POND:									
Dudley	23	539	595	788	372	72	2389		
Cathedral	173	858	1315	1263	809	256	4674		
Saddle	0	1315	2511	2511	1263	325	7925		
Hamlin	5	104	156	163	185	42	655		
N. Basin	13	180	221	158	196	66	834		
N. Peaks	0	14	16	2	16	0	48		
N.W. Basin	0	41	83	36	30	7	197		
CHIMNEY TOTALS	214	3051	4897	4921	2871	768		16722	16%
DAICEY POND:									
Niagara Falls	259	793	1398	1692	955	219	5316		
D.P. Nature Trail	38	67	164	187	284	67	807		
Lost Pond Trail	29	30	63	44	60	7	233		
Sentinel Mt. Trail	6	6	12	33	21	21	99		
A.T. to Katahdin	8	12	152	231	224	171	798		
Daicey to Grassy	31	46	87	81	108	31	384		
Daicey to Elbow	19	60	98	126	96	26	425		
Daicey to Kidney	10	27	25	57	38	20	177		
DAICEY TOTALS	400	1041	1999	2451	1786	562		8239	8%
KIDNEY POND:									
Double Top	7	106	111	279	234	52	789		
Sentinel Mtn.	18	80	279	396	165	115	1053		
Rocky Pond	16	142	130	131	103	53	575		
Draper Pond	6	39	71	74	43	46	279		
Kid. Pond Circuit	5	8	33	107	39	26	218		
Celia & Jackson	9	33	35	50	42	26	195		
Windy Pitch/Niagara/ Lily	12	80	135	198	114	46	585		
KIDNEY TOTALS	73	488	794	1235	740	364		3694	4%
RUSSELL POND:									
Russell Pond Trail	10	94	195	201	110	90	700		
Wass. Stream Trail	19	119	183	198	115	70	704		
Pogy Notch Trail	60	36	67	35	67	20	285		
Wass. Lake Trail	83	154	231	263	119	57	907		
N.W. Basin Trail	6	40	109	85	42	32	314		
N. Peaks Trail	0	2	12	13	11	10	48		
Grand Falls Trail	21	46	94	101	42	13	317		
Lookout Trail	7	23	77	80	13	21	221		
RUSSELL TOTALS	206	514	968	976	519	313		3496	3%
TROUT BROOK FARM:									
Horse Mountain	5	58	122	110	38	10	343		
Five Ponds	14	115	148	163	118	8	566		
Fowler Pond	15	104	115	198	104	26	562		
Freezeout	11	61	326	380	172	42	992		
Trout Brook Mtn.	15	46	177	37	44	12	331		
TROUT BR. TOTAL	60	384	888	888	476	98		2794	3%
TOTALS BY MONTH									
TOTALS BY MONTH	3576	15514	27744	30110	17267	7113		101324	100%
% OF TOTAL	4%	15%	27%	30%	17%	7%		100%	

REGISTERED HIKES BY AREA - 1999



BAXTER STATE PARK

Camper Day Summary

1999

1999							% OF SUMMER CAMPER				% OF WINTER CAMPER				ANNUAL CAMP-DAY	% OF PARK	
CAMPGROUNDS	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	TOTAL	DAY	DEC.	JAN.	FEB.	MAR.	TOTAL	DAY	TOTAL	TOTAL	
Roaring Brook	288	1343	1840	1727	1305	457	6960	14%	63	87	145	231	526	28%	7486	15%	
Abol	260	737	1625	1742	1161	321	5846	12%	0	10	65	20	0	0%	5846	12%	
Katahdin Stream	440	1019	1881	1973	1176	401	6890	14%	0	0	0	18	18	1%	6908	14%	
Daicey Pond	313	685	891	929	745	368	3931	8%	0	28	55	8	91	5%	4022	8%	
Kidney Pond	112	750	1014	1030	842	413	4161	9%	0	0	40	21	61	3%	4222	8%	
Nesowadnehunk	68	396	1465	1562	451	193	4135	9%	0	0	20	28	48	3%	4183	8%	
Trout Brook Farm	CLOSED	133	688	1094	137	15	2067	4%	0	0	57	18	75	4%	2142	4%	
S. Branch Pond	261	825	2696	2797	1266	343	8188	17%	0	0	156	18	174	9%	8362	17%	
Russell Pond	144	365	684	622	369	144	2328	5%	0	0	59	4	63	3%	2391	5%	
Chimney Pond	CLOSED	803	947	908	694	267	3619	8%	0	201	272	359	832	44%	4451	9%	
Campground Total	1886	7056	13731	14384	8146	2922	48125	78%	63	326	869	725	1888	100%	50013	78%	
GROUP AREAS																	
Avalanche Field	152	565	914	774	485	166	3056	32%								3056	32%
Foster Field	172	364	856	829	322	108	2651	27%								2651	27%
Nesowadnehunk	19	296	1028	758	100	12	2213	23%	C L O S E D							2213	23%
Trout Brook Farm	CLOSED	144	409	688	82	16	1339	14%								1339	14%
Abol Scout Area	40	81	115	88	72	39	435	4%								435	4%
Group Area Total	383	1450	3322	3137	1061	341	9694	16%								9694	15%
OUTLYING SITES																	
S. Branch Pond	48	89	224	193	158	62	774	18%								774	18%
Fowler	0	52	83	165		101	401	10%								401	10%
Webster	0	73	318	330	180	58	959	23%								959	23%
AT Shelter	19	87	247	324	123	67	867	21%	C L O S E D							867	21%
Davis	CLOSED	33	72	51	37	12	205	5%								205	5%
Wassataquoik Area	27	100	244	284	146	61	862	20%								862	20%
Mat.High Adv.	0	35	52	0	53	0	140	3%								1018	11%
Outlying Total	94	469	1240	1347	697	361	4208	7%								4208	7%
TOT. CAMPER DAYS	2363	8975	18293	18868	9904	3624	62027	100%	63	326	869	725	1888	100%	63915	100%	
% OF PARK TOTAL	4%	14%	29%	30%	15%	6%	97%		0%	1%	1%	1%	3%		100%		

COMPARATIVE STATISTICS - CAMPER DAYS

TOTAL CAMPERS (23,269)

1989 - 1999

2.67 DAYS PER CAMPER (Summer)

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
CAMPGROUNDS:											
Roaring Brook	7653	7406	7664	10769	7450	7527	7660	7556	6972	7855	6960
Abol	5691	5381	5601	5623	5707	5493	4236	5744	5294	5752	5846
Katahdin Stream	7743	7223	7353	7654	7227	7148	7372	6828	6710	6926	6890
Daicey Pond	4636	5138	4842	4428	5681	4072	4400	4149	4249	4163	3931
Kidney Pond	2179	3315	3826	4565	4654	4595	4934	4397	4432	4324	4161
Nesowadnehunk	4223	4695	4425	4528	4631	3594	4294	4063	4059	3933	4135
Trout Brook Farm	3077	2977	2650	2717	2537	2440	2395	2157	1867	1868	2067
South Branch Pond	9380	9251	9610	9900	9587	8973	9595	9141	8540	8193	8188
Russell Pond	2881	2961	2968	3029	2900	2959	2959	2901	2697	2818	2328
Chimney Pond	3888	3812	3849	3973	3794	3966	3971	3968	3458	3700	3619
TOTAL	51351	52159	52788	57186	54168	50767	51816	50904	48278	49532	48125
GROUP AREAS:											
Avalanche Field	2968	3116	3110	3093	3033	2654	3210	3152	2586	2772	3056
Foster Field	2627	2564	2690	2845	2772	2346	2824	2036	2456	2542	2651
Nesowadnehunk	1959	1501	1667	1722	2124	2026	1943	1803	1802	2022	2213
Trout Brook Farm	1714	1169	1331	1156	987	999	1127	1724	1325	1374	1339
Abol Scout Area	-	-	-	1500	1500	1243	1440	2400	1652	545	435
TOTAL	9268	8350	8798	10316	10416	9268	10544	11115	9821	9255	9694
OUTLYING SITES:											
South Branch Area	565	678	649	803	758	820	868	856	535	729	774
Fowler Area	1003	796	734	659	478	650	462	412	212	463	401
Webster Area	1373	1315	1181	1514	1137	1259	1140	765	569	853	959
AT Shelter	393	386	484	414	887	626	839	655	562	192	867
Davis Pond Area	251	271	230	250	244	235	285	192	221	233	205
Wassataquoik Area	829	868	848	950	953	968	813	828	722	761	862
Matagamom High Adver	-	-	-	-	-	1018	572	245	314	477	140
TOTAL	4414	4314	4126	4590	4457	5576	4979	3953	3135	3708	4208
TOTAL SUMMER CA	65033	64823	65712	72092	69041	65611	67339	65972	61234	62495	62027
WINTER CAMPER D	1810	1895	2435	1868	1868	2124	2124	1913	1750	1750	1888
TOTAL ANNUAL CA	66843	66718	68147	73960	70909	67735	69463	67885	62984	64245	63915

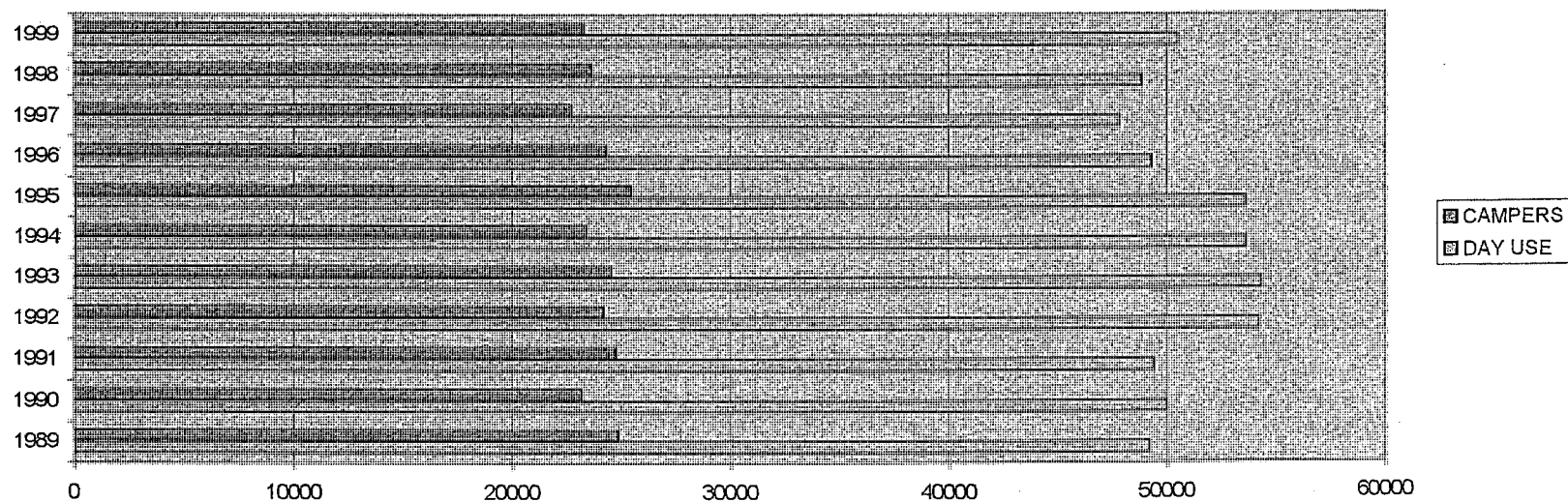
BAXTER STATE PARK COMPARATIVE STATISTICS 1989 - 1999

GATEHOUSE STATISTICS:

PERSONS	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Resident	50440	46913	47306	48110	49673	47918	48361	43658	41722	42431	42569
Non-resident	30194	30622	32028	34417	33419	32619	34783	33925	32968	34632	34714
TOTAL	80634	77535	79334	82527	83092	80537	83144	77583	74690	77063	77283
Campers	24869	23205	24755	24197	24508	23362	25496	24362	22717	23689	23269
Day Use	49195	50012	49402	54208	54335	53579	53591	49313	47813	48900	50513
Transient	6570	4318	5177	4122	4249	3202	3776	3595	3855	4141	3324
Walk/Bike	-	-	-	-	-	394	281	313	305	333	177
K.P. Lodge	-	-	-	-	-	-	-	-	-	-	-
TOTAL	80634	77535	79334	82527	83092	80537	83144	77583	74690	77063	77283

VEHICLES	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Togue Pond	22094	22523	23436	27763	28055	26417	28294	26251	25578	25446	24445
Matagamon	4797	4858	4755	4783	4895	4920	5660	5519	6345	6596	5260
West Gate	1585	-	-	-	-	-	-	-	-	-	-
TOTAL	28476	27381	28191	32546	32950	31337	33954	31770	31923	32042	29705

GATE COUNT 1989-1999



**BAXTER STATE PARK
CAMPGROUND VACANCY RATES ***
1999

	# SITE-DAYS PER SEASON	# VACANT SITE	% 1999 VACANCY
CAMPGROUNDS:			
Roaring Brook	3234	498	15%
Abol	3080	1114	36%
Katahdin Stream	3388	606	18%
Daicey Pond	1694	221	13%
Kidney Pond	1740	179	10%
Nesowadnehunk	1926	955	50%
South Branch	4774	2207	46%
Chimney Pond	1233	188	15%
Russell Pond	1232	379	31%
Trout Brook Farm	1644	1207	73%
Campground Totals	24755	7554	31%

OUTLYING SITES:

Webster Area	1781	1016	57%
Davis Pond	137	38	28%
Fowler Area	1096	939	86%
South Branch	462	154	33%
Wass. Area	462	153	33%
Nesowadnehunk	306	168	55%
Outlying Site Totals	4546	2300	51%

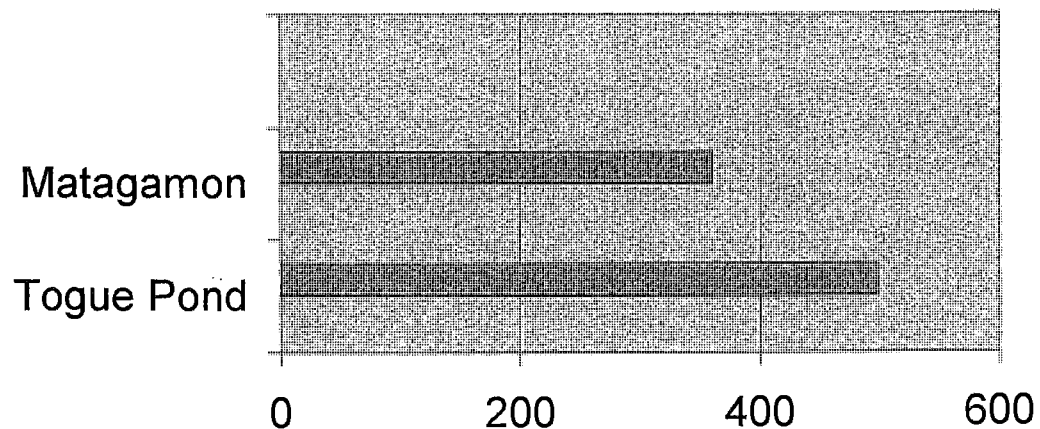
* These tables reflect the rate at which sites were occupied regardless of whether or not the site was filled to capacity. Tabulations include campground and outlying sites only (bunkhouse & group areas excluded).

BAXTER STATE PARK

1999 GATE COUNTS - PEOPLE PER MONTH

	CAMPERS			DAY USE			TRANSIENTS			WALK/ BIKE	TOTAL BY MONTH	% OF TOTAL
	RES	NON-RES	TOTAL	RES	NON-RES	TOTAL	RES	NON-RES	TOTAL			
Togue Pond	0	0	0	180	131	311	103	78	181	6	498	
Matagamon	0	0	0	131	179	310	11	39	50	0	360	
Total	0	0	0	311	310	621	114	117	231	6	858	100

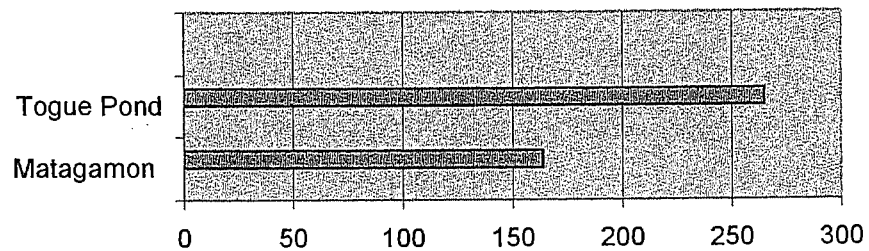
DAY USE - NOVEMBER 1999



**BAXTER STATE PARK
1999 GATE COUNT VEHICLES FOR NOVEMBER**

	VEHICLE				% OF	TOTAL	AVE.
	RES	NON-RES	PASS	TOTAL	TOTAL	PEOPLE/	PEOPLE/
					VEHICLES	MONTH**	VEHICLE
Togue Pond	157	98	0	255			
Matagamon	65	99	0	164			
Total NOVEMBER	222	197	0	419	100	858	2

VEHICLE USE - NOVEMBER 1999



BAXTER STATE PARK

COMPARATIVE STATISTICS - HIKER DAY

1995 - 1999

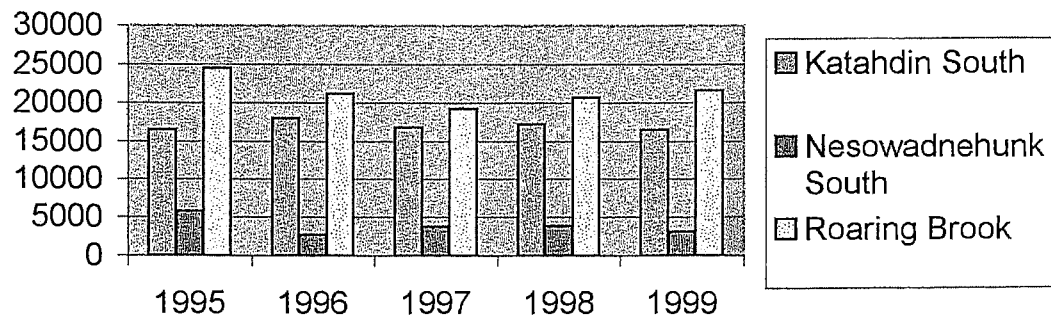
Hiker Day Statistics:	1995	1996	1997	1998	1999
Katahdin South	16439	17993	16765	17204	16468
Nesowadnehunk South	5805	2655	3765	3814	3086
Roaring Brook	24477	21133	19248	20618	21575

Katahdin South includes: Hunt, Owl, Abol

Nesowadnehunk South includes: Doubletop/North, Doubletop/South, Marston

Roaring Brook includes: Chimney Pond Trail, Helon Taylor Trail

COMPARATIVE STATISTICS - HIKERS



F. FINANCIAL REPORT

BAXTER STATE PARK
STATEMENT OF REVENUE AND EXPENDITURES
FISCAL YEAR ENDING JUNE 30,1999

ALANCE FORWARD JULY 1,1998

\$161,092.00

REVNUE

PARK OPERATIONS

Recreational Use Fees	\$546,538.80	
Transfer Fees	\$4,325.00	
Entrance Fees	\$102,049.55	
Miscellaneous Services	\$28,181.09	
Sale of Maps, Books, etc.	\$22,797.16	
Sale of Forest Products	\$133,264.65	
Foreign Exchange Differential	\$748.05	
Duplicate Fees	(\$277.75)	
Overpayments Refunded	(\$14,315.48)	
TOTAL PARK OPERATIONS		<u>\$823,311.07</u>

TRUST FUNDS

Boston Safe Deposit and Trust	\$1,405,200.00	
State-Held Trust	\$150,000.00	
TOTAL TRUST FUNDS		<u>\$1,555,200.00</u>

MISCELLANEOUS REVENUE

Interest on Investment	\$12,490.34	
Special Licenses and Leases	\$107.00	
Sale of Equipment	\$4,314.00	
Miscellaneous Income	\$3,673.20	
TOTAL MISCELLANEOUS REVENUE		<u>\$20,584.54</u>

TOTAL REVENUE ALL SOURCES

\$2,399,095.61

TOTAL REVENUE AVAILABLE

\$2,399,095.61

EXPENDITURES

PERSONNEL SERVICES

Salaries, permanent	\$607,597.59	
Salaries, seasonal	\$307,681.44	
Overtime/Differential/Retro	\$49,857.68	
Retirement Contribution	\$124,492.99	
Other Benefits	\$270,379.98	
TOTAL PERSONNEL SERVICES		<u>\$1,360,009.68</u>

ALL OTHER

Contractual Services	\$130,394.00	
Park Operations - All Groups	\$455,993.34	
Sta-Cap Charges	\$19,687.19	
TOTAL ALL OTHER		<u>\$606,074.53</u>

CAPITAL

Buildings	\$147,832.87	
Equipment	\$140,513.85	
TOTAL CAPITAL		<u>\$288,346.72</u>

OTAL EXPENDITURES

\$2,254,430.93

ALANCE FORWARD JUNE 30,1999

\$305,756.68

**G. DIRECTOR'S CONCLUDING
REMARKS**

DIRECTOR'S CONCLUDING REMARKS

The final days of 1998 and the early months of 1999 offered this Director the opportunity to reflect frequently, not only on the accomplishments of 1999 and our recent years, but to reminisce on many other years long gone by. For the transition from this year to the year 2000 was a milestone of 40 years at BSP. So you might say other than a few elementary years with some schooling thrown in the majority of my life I have lived within the shadows of Mt. Katahdin. During these years there has seldom been a time when challenges were not offered, seldom a workday that was routine and seldom a time that I can recall when my career has been dull. I do not expect this to change with the turning of the calendar. As we look ahead to the upcoming season, there are many things that need to be done at the Park, offering us the opportunity to do the best job that we can in making the Park available to those users but never tramping on the primary objective of protecting it.

For a few years now BSP has worked closely with local residents and members of the Advisory's Use Committee to implement a watercraft storage policy pertaining to water within the Park which will allow, through attrition, the reduction of privately owned watercraft being stored at remote ponds. This has been a very successful approach and as the numbers reflect, the long-term objective is being achieved. The policy does however require continued monitoring and implementation and it is our intention to continue these efforts through the year 2000. During that year we also look forward to working with our neighbors who are located on inholding properties via lease or ownership within BSP, namely those waters on Upper or Lower Togue Pond and the shores of the West Branch of the Penobscot River. Many years ago it was mentioned to me by a friend that when you live in the North Maine Woods you're pretty much on your own and when you get in a jamb, you depend on those you work with to assist as you would assist them in a like situation. That was good advice taken seriously and we will continue our efforts to be good neighbors.

In the year 1999 the Maine Legislature passed a bill which terminated the services of the MDOT for tote road maintenance within the Park at calendar year's end 2000. One of our primary focuses early in year 2000 will be to determine how we will maintain the tote road according to the Park's specifications in the years to come. We believe that this can be accomplished via the following two methods: long term contract services for grading and surfacing purposes and routine maintenance by Park staff and equipment. We will work closely this coming year to assure a smooth transition.

As instructed by the BSP Authority in 1999 the year 2000 will be a year of close evaluation of the former Abol Scout area and it will be my responsibility to work closely with the Advisory to determine some long term solutions regarding its existence and use or non-use. Early in the new year it will be a high priority focus on the completion of the Abol Field Crew Camp. We anticipate use of this facility at the starting date of seasonal employees. This means that the three surplus camps need to be disposed of during the

first few months of the summer season, namely Mtn. View Camp (to be bid off), the old Maine forest Service Pine Cove Camp (to be donated to the Millinocket Middle School Outing Club) and the obsolete of the obsolete Hidden Camp which is to be dismantled. It is our objective and plan to develop a new Trail Crew facility at a well-designated site just north of Roaring Brook on the roaring Brook road. Site preparation will be completed by season's end. Our long-term objective is to eliminate a cluster of buildings near the old Warden camp at Roaring Brook and re-establish that area as a day use picnic facility. We will continue to evaluate the bunkhouse crew camp at Chimney Pond and refine planning to replace that within five years. And finally during this season we will complete the new housing units within the SFMA by adding the last camp. All of these are major projects and certainly create ambitious agendas.

In the year 2000 I look forward to working with the newly organized group whom are independent of Park operations and administration that call themselves the Friends of BSP. They are interested, informed users of the Park and their primary purpose is to assist and support the Park in carrying out trust provisions.

I anticipate that during the year we will continue to work with distinguished guests who visit BSP on occasion. At the writing of this report, it is my understanding that Senator Baldacci will be contacting us soon. Of course the Authority who governs the Park will hold their spring and fall meetings, conditions permitting. This is important for this is a practice that was established by Governor Baxter early on in his mission and continued until 1967 when he made his last visit in the fall. BSP has tremendous support in the Maine Legislature and although they deal with hundreds and hundreds of bills each year that are not pertinent to the Park, there are always some that are and it is my job to keep them informed on the impacts of such LD's whether they be negative or positive. I will do my best to do so.

In 1971 the Attorney General James Erwin signed a policy which authorized Commissioned BSP Rangers (law enforcement) who had completed extensive training either at the Maine Warden School or the Criminal Justice Academy to carry firearms. Our law enforcement policy is low profile and mandates that these Rangers qualify and train on a regular and as-needed basis. This policy has been in effect all of these years. This year there has been a transition from the traditionally issued 357 revolver to the automatic 357 sig. Consequently we will train with the Maine State Police to meet the criteria of the transition. This will happen early in the year 2000.

We will continue our efforts to keep all Park equipment safe and up to date. Therefore amongst our capital equipment will be replacement of the two annual new vehicles and snowsleds. Many of our short-term season vehicles used only a few months of the year are extremely old and fatigued. We will attempt to replace a couple of those per year with good used vehicles of a later vintage.

During the upcoming year I will do my best to work with groups and organizations, keeping them informed on their Park. To mention a few, we will hold our communications Committee meetings in June and December. I am scheduled to meet with the Milo Garden Club and with the Patten Methodist's Club early on. I have also been asked to serve as moderator at a wilderness workshop in Colorado in September and have accepted that invitation. The BSP Advisory committee fills a very important role in working with staff and assisting the Authority with information pertaining to current issues as they have been assigned. One of the most challenging subjects that we have before us is a request presented by the Native Americans. It is our intention and our hope that through effective dialogue and understanding, we will be able to assist them as their requests come in periodically and that this can be done in a fair non-biased and effective manner which is consistent with the Park's deeds of trust.

This year as in past years and the years to come we will focus with thoughtfulness and conservatism in preparing our budgets. Certainly the moneys that are necessary to maintain the resources and public services will be projected for expenditures, but only when this Director is assured after a very detailed review process that those projections are within the revenue resources spending limits and compliment a surplus which contributes to the long term financial security of the Park, for as Governor Baxter very well recognized in order for us to protect the natural resources we must have the financial resources and never again should we depend on the Maine Legislature.

We are committed to assuring a safe and professionally trained work force. We will make every effort to keep staff informed and trained via departmental efforts at the Park and with cooperation of the Department of Human Resources as is appropriate and necessary.

We look forward to working with the community, specifically its Chamber of Commerce, in participating with its third End of Trail Festival for current members and alumni of the AT. Because we are the terminus of the 2000-mile trail, it is only appropriate that the Park and the community unite in such a worthwhile mission. In speaking of AT trail users, we will continue our objective of working with the MATC and ATC to reduce impacts to BSP by late arrivals who have been coming in recent years in great numbers after the Park closes on October 15th. Projections are that the year 2000 being the millennium the numbers may double. Any increase will offer us challenges and we will need many people to assist us on the best solution to this issue.

Huey films has assured me that he will complete his three-year project at BSP during the year 2000. I have been pleased to have been able to assist him and look forward to the end result which we trust will be beneficial to the historic and information educational needs of BSP.



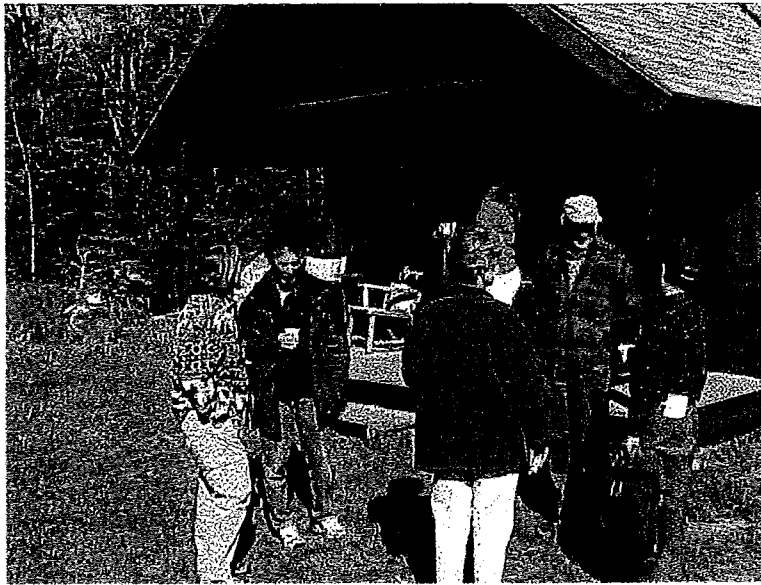
Blaze on tree on Appalachian Trail

Also during this season early on we anticipate the installation of a TTY and the training associated with it, another effort on our part to assist our hearing impaired friends. This is specifically important because of Governor Baxter's efforts for the same with the donation of Mackworth Island and development of the school.

During the last several years we have attempted to name the trails and facilities in the Park consistent with natural resources and have avoided people's names which tend to memorialize. This process has been very effective in naming facilities and landmarks with the SFMA, other new trails within the Park and cabins in Kidney and Daicey Ponds. Jen Hall of our staff has volunteered to coordinate staff ideas and make recommendations to the Director for the naming of new trails on the West Branch lands. This also will be a goal for the year 2000.

At the start of this conclusion I alluded to challenges. The above are but a few for, as we learn in the course of any season of any year at BSP, there is always much to do but it is never done with a lack of enthusiasm and professionalism for the staff are doing a great job in representing our Park.

And finally I would be negligent if I did not recognize and extend my heartfelt appreciation to Paul Stern, Deputy Attorney General. Without any doubt Paul's expertise on the Percival P. Baxter trust and Park matters is most helpful in reassuring this Director that we are doing things the way we are supposed to. He is a good friend of the Park, an unsung hero and he deserves the thanks of all of us who are privileged to work with him.



Connie Baxter Marlow, Paul Stern, Linn Spalding, Rupert White and Malcolm Coulter, Jr.
BSP Advisory members, trust officers and staff as well as interested
Guests work closely with Authority to assist them in meeting their
Mandate of preserving and protecting BSP.

To each and everyone, my most humble appreciation.

Happy trails,

H. APPENDIX

BAXTER STATE PARK
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Effective 10/99

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REVISED 10/99

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Although the majority of members do not hold Baxter State Park Advisory or Ad Hoc status, they are individuals with specialized backgrounds providing much expertise in viewing scientific study requests as assigned. Final approval or rejection on requests is responsibility of BSP Director.

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