



**The future of our forests
starts with SFI**

***Maine SIC Progress Report
2016-2017***

This report was produced by Maine's SFI Implementation Committee (SIC)

535 Civic Center Drive, Augusta ME 04330

207-622-9288 www.sfmaine.org psirois@maineforest.org



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Concerned about a timber harvesting operation in your community?

Call 1-888-734-4625

If you have questions or concerns about any forest practices in Maine or need information about forest tours, please call!

SFI GOAL is a confidential, toll-free hotline established specifically for the purpose of responding to public questions and concerns regarding forestry and timber harvesting practices in Maine. It's important to

understand that this is not an enforcement program.

Since 1997, we have responded to concerns ranging from water quality issues to visual impacts of a harvest by sending forest resource professionals to investigate. Our goal is to improve practices on the ground.

We work effectively with loggers, landowners and foresters by sharing techniques and knowledge to encourage the best possible outcomes, including training programs that can be delivered to our loggers, foresters and landowners.



SFI is a sustainability leader dedicated to the future of our forests.



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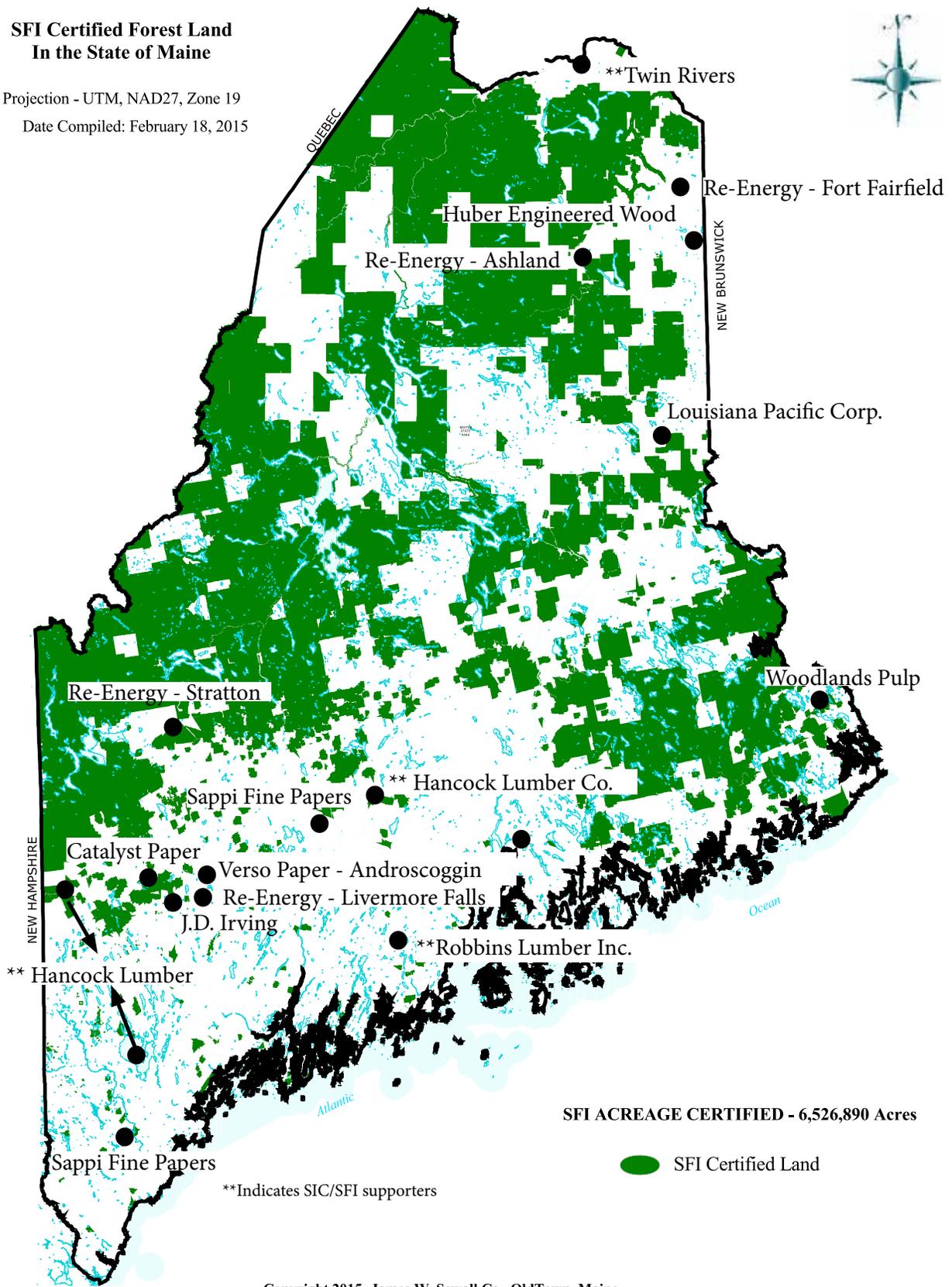
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**SFI Certified Forest Land
In the State of Maine**

Projection - UTM, NAD27, Zone 19
Date Compiled: February 18, 2015



SFI ACREAGE CERTIFIED - 6,526,890 Acres

 SFI Certified Land

Copyright 2015- James W. Sewall Co., OldTown, Maine.
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2016 was a successful year for SFI® Maine

Education and outreach has long been a strength of our SFI Implementation Committee and that focus continued in 2016, with 53 events and workshops, reaching about 4,000 people.

Our partners in these efforts included SFI Program Participants and the University of Maine, as well as many organizations, businesses, agencies, including:

- **Organizations:** Certified Logging Professional, Maine Forest Products Council, Forest Resources Association, Maine Audubon, Maine Snowmobile Association, Maine Forester's Institute, Maine Tree Farm Committee, Maine TREE Foundation, North-eastern Loggers Association. Maine Woodland Owners (formerly SWOAM) and Project SHARE.
- **Businesses:** Dirigo Timberlands, T.R. Dillon Logging.
- **State and federal agencies:** Maine Department of Agriculture, Conservation and Forestry, Maine Forest Service, National Oceanic and Atmospheric Administration (NOAA), U.S. Fish and Wildlife, U.S. Department of Interior Leadership Visitor Program and the City of Westbrook.

Training priorities for 2017 will include workshops covering biodiversity, road building, stream crossings and BMP refreshers.

Projects of note included participation in the Fisheries Improvement Network to continue improvement of fish passage in Maine streams and continued support of the Maine's Healthy Forests Program.

Other noteworthy efforts were our communications about the recently announced pilot to accept SFI certified products in the U.S. Green Building Council's LEED Standard and continued support to build modern cabins at Pine Tree Camp in Rome, which provides opportunities for disabled children and adults and was selected as Maine's Outstanding Tree Farm of 2016;

SFI volunteers built an outdoor classroom at Maine Tree Foundation's Holt Research Forest in Arrowsic (see Pages 4-5) and donated popular flume tables to a variety of organizations (see Pages 6-7).



Dave Griswold
*Chair, Maine SFI
Implementation Committee*

In December, SFI Maine supported a successful proposal to SFI Inc's Conservation and Community Partnerships Grant Program. Details will follow.

SFI Maine Program Participants and financial supporters now total 21, including forest landowners, as well as companies with manufacturing facilities and biomass power plants. We welcomed new certified Program Participants Portage Wood Products, Clayton Lake Woodlands Holdings Downeast Unit, and The Tall Timber Trust in 2016.

Looking forward, SFI Maine will continue to seek out opportunities to provide value to all stakeholders who benefit from sustainable forestry in Maine, including landowners large and small, loggers, foresters, manufacturers of forest products, and the general public.

We will strive to increase partnerships and collaborations that improve awareness of the importance of sustainable forestry in Maine and elsewhere. We must continue to look for ways to increase the value proposition for program participants who embrace SFI certification.

SFI Maine Program Participants and partners have literally changed the landscape since the Sustainable Forestry Initiative® began in 1995. Part of the SFI Standard is the concept of continuous improvement. We recognize and welcome the challenges ahead. Public input is always welcome.

Thanks to our coordinator Pat Sirois for his able leadership as the recognized face of SFI Maine, as well as to all the others who contributed to 2016's success and achievements in large and small ways. We all share the benefits of the healthy, productive forest that is such a significant part of our state.

I am honored to serve as chair of such a fine organization.





SIC Crew working on August 30 at the Holt Research Forest in Arrowsic: From left, Tim Richards, Scott Pease, Gordon Gamble (on ground), Kevin McCarthy and Kevin Doran.

SIC volunteers build classroom at Holt Forest

It was like a barn raising – only without the barn. Over three days this summer, volunteers from across Maine’s forest community helped create an outdoor classroom pavilion for the Maine TREE Foundation at the Holt Research Forest in Arrowsic.

“Maine TREE is excited about the opportunity to bring teachers, students and the community into closer contact with the research, data and hands-on experience at our own Holt Forest,” said Sherry Huber, executive director. “We are especially grateful to University of Maine resident scientist Jack Witham, Maine SFI Director Patrick Sirois and all the volunteers who pitched in and to those who donated materials to make our Outdoor Classroom a reality over this past summer.” (See list next page.)

Al Cowperthwaite, director of North Maine Woods, drove four hours on August 30 to bring a high-quality outhouse to the site. He then had the skill to back his truck and the outhouse down a very narrow road – more like a path really – into the woods behind the work site. He got plenty of good-natured advice from his fellow volunteers along the way.

“We may have had too many cooks at the beginning,”

joked Kevin McCarthy, “but once we got focused we really were able to accomplish a lot together.”

McCarthy is a member of the Outreach Committee of the SFI Implementation Committee (SIC), and also president of the TREE Foundation Board. He and the rest of the crew worked hard, but also enjoyed the collaboration with old and new friends.

“It’s a very diverse group of people and they’re all volunteers – nobody had to be there,” McCarthy said. “We have fun, but we were there because it’s a great project.”

The project started June 23, when members of the Certified Logging Professional (CLP) Board brought their equipment and UMaine students also pitched in to clear trees from the site of the outdoor classroom, access road and off-road parking area, said CLP Executive Director Mike St. Peter.

“CLP instructor John Cullen incorporated directional felling instruction with the students while clearing an area for the classroom,” St. Peter said. “All merchantable wood was salvaged and skilled directional felling resulted in no damage to adjoining residual stand.”



For more than three decades, scientists from the University of Maine have been [studying](#) the tract of oak-pine forest, which was offered to the university for research by William and Winifred Holt. Their family endowed the Holt Woodland Research Foundation and donated funds to the university for its long-term forest ecosystem study until 2014, when the foundation merged with the Maine TREE Foundation.

The 100-acre study area, dominated by oak and pine, is within a tract of nearly 300 acres, bordered by the Back River, an estuarine branch of the Kennebec River, on the east. Sewell Pond, the only Great Pond on Arrowsic Island, and Route 127 form the western boundary.

The SIC Outreach Committee thought building the outdoor classroom “was a worthwhile project to do and we wanted to be part of it,” Sirois said. “We’ve done similar projects with Habitat for Humanity in the past and we have sort of a trained crew who shows up when we take on one of these projects.”

Sirois also had a special interest in the project because he worked on the research forest at the beginning.

“We cut this wood lot for the research project,” Sirois said. “We harvested 50 acres out of the 100 acre research area. There were 2 ½ acre lots organized like a checkerboard and they randomly selected the blocks that they wanted to harvest versus the ones that were the controls. So for me it was fun to come back.”

The forest research plan emphasized monitoring long-term changes in the forest’s plant and animal populations and to document the effect of forest management on these populations.

“We did about a 40 percent removal and we’ve really been studying the response of those canopy gaps that we created by the harvest and what’s grown in,” Witham



Bill Leak of the U.S. Forest Service holds an oak management workshop sponsored by MFS and SFI.

said. “It’s all natural regeneration.”

Many groups have visited the research forest for educational programs, including landowners, natural resource professionals, foresters, loggers, and wildlife people, but the outdoor classroom will expand educational outreach.

“We’ve always thought it would be nice to have a place under cover,” Witham said. “This will enable Project Learning Tree workshops here and we’ve been setting up some meetings with some of the local schools.”

McCarthy, who was working on Sept. 2, when the outdoor classroom was completed, is excited about the new opportunities for teaching children and adults about Maine’s forests.

“I think it’s got tremendous potential,” he said, “and the next step will be to promote its use.”

Volunteers: Pat Sirois, Dave Griswold, Jack Witham, Al Kimble, Scott Pease, Tim Richards, Gordon Gamble, Kevin Doran, Al Cowperthwaite, John Starrett, Kevin McCarthy, John Cullen, Mike St. Peter, Erik Carlson and Steve Laweryson.

UMaine students Ethan Hill, Ryan Karroll, and Todd Douglass helped with the clearing as did Clarke Cooper, a UMaine employee at the Holt Forest for the summer.

Materials were donated by Hancock Lumber, Huber Engineered Woods, Viking Lumber and Mainely Trusses. Support also was received from Maine Forest Service Project Canopy, the Maine Timberlands Charitable Trust, the Elmina Sewall Foundation and the Morton-Kelly Charitable Trust. Robbins Construction of Arrowsic loaned the staging that made the job much easier.



Crowd pleaser



From the Hall of Flags to the Maine Snowmobile Show and far beyond the flume table has raised awareness of stream smart crossing techniques, fisheries habitat restoration, sustainable forest management, best management practices to protect water quality, and innovative, low-cost stream crossings.



The surprising staying power of flume tables

By Pat Sirois
SIC Coordinator

Wherever we put up a flume table it always attracts an eager and enthusiastic crowd. From the Maine Science Festival in Bangor to the Maine Snowmobile Show in Augusta, the Children's Water Festivals in Orono to the University of Southern Maine campus in Portland, the flume table is a natural attractant, piquing the curiosity of children and adults alike.

"The flume table presentation taught us a lot about how streams are developed and how they change," said a student from Maranacook Community High School. "We learned about different ways to build roads across streams and the best way to do that. It was good for us to see how real life applications work; how to make road crossings safe. These are things we see every day."

SFI's flume tables started out as a teaching aid to demonstrate natural stream functions, but has turned into an

effective SFI outreach tool to raise awareness of stream smart crossing techniques, fisheries habitat restoration, sustainable forest management, best management practices to protect water quality, and innovative, low-cost stream crossings.

When our education subcommittee constructed two tables in 2011 – entirely of SFI certified wood – we believed they would be effective teaching aids, but expected they would run their course after a couple of years of touring the state for training sessions for loggers and foresters. Yet the tables are still drawing crowds even after more than 50 sessions, reaching well over 1,000 forestry practitioners, as well as presentations to several hundred public road practitioners in a parallel effort by Maine Audubon.

Connecting the dots between sustainable forest management, habitat restoration and the certified forest products derived from that relationship was a worthwhile endeavor. What we didn't predict was the strong desire by a variety of groups and individuals to bring



In the U.S. & Canada 285 million acres are certified to SFI standards.

this message to diverse audiences.

When presenting at various events, we were approached not only by teachers, soil and water conservation districts staff, and others from state and federal agencies to help them tool-up to deliver these same presentations. The question was how could they get a flume table?

Hearing of this challenge/opportunity, the Maine Forest Service (MFS) awarded a grant to the SFI Implementation Committee (SIC) to construct five flume tables.

In partnership with MFS and the Maine Department of Inland Fisheries and Wildlife, the SIC delivered the new flume tables during a Train-the-Trainers workshop on December 13.

Recipients included NOAA, Franklin and Hancock County soils and water conservation districts, Maranacook Community High and the Maine Forest Service northern division.



The flume tables will help students “make connections with the landscape and issues in their community that are associated with streams.”

“My goal as a teacher is to provide students with an exciting way to investigate real problems,” Cheryl Marvinney, Earth Science teacher at Maranacook High wrote in an email later. “By using the flume/stream table students will make connections with the landscape and issues in their community that are associated with streams. They will design and

carry out and present their own experiments. Students who attended the SFI implementation workshop saw multiple instances where understanding stream behavior impact both the environment and people.

“Thank you for treating the students as adults, at your meeting. How cool is that?” Marvinney added. “They had the opportunity to ask questions and see adults working together to solve problems. Students were excited that they understood some of the chemistry that was presented. Others live on dirt roads and talked about checking out their culverts once they got home. The two young men that I brought were interested in the relationship to fishing.

“A huge takeaway that I will use in my classroom is the variety and amount of entities that are involved in such a basic sounding thing; constructing a culvert for a stream crossing,” Marvinney wrote. “When students ask why should I be doing this I will have quite an answer for them.”



SIC Coordinator Pat Sirois demonstrates the flume table at a Train-the-Trainers presentation Dec. 13 at the Maine Forest Products Council.



SFI manages the world's largest single forest certification standard.

SIC tailors program to fit Maine's unique needs

SFI Implementation committees (SIC) are located in all states and provinces where there are SFI-certified landowners and forest products manufacturers, 35 in all in the U.S. and Canada. The SICs help certified companies meet obligations outlined in the SFI standards that can be accomplished through cooperative and coordinated efforts. Each state or province has the autonomy to tailor their committee structures to meet the unique needs and partnership opportunities that exist.

In Maine, the SIC sets the direction for its programming, establishes funding requirements by SFI program participants, and approves budgets and work plans proposed by the Executive Committee with feedback from the subcommittees. There are four primary subcommittees whose relationships broaden the networks beyond the industry with groups and individuals who have knowledge, expertise and responsibilities for forestry-related natural resources.

Our Honor and Integrity Committee manages the SFI GOAL hotline (1-888-734-4625). The hotline provides Maine's public with a transparent avenue to interact with the industry when seeking clarification on practices they determine to be of concern. Information gathered through these interactions are communicated at each of the quarterly SFI board meetings and ultimately incorporated into continuing education programs for loggers, foresters and landowners as part of the continuous improvement process.

The Wildlife Committee's role is to interact with natural resource agencies, universities and conservation organizations in determining the wildlife and habitat priorities for the region that relate to forestry. The committee is also active in working with these groups to develop best practices associated with specific species and habitats. Best practices, once identified, are promoted through the SIC education committee to appropriate audiences.

One of the most productive efforts by the Wildlife Committee was the establishment of the Fisheries Improvement Network (FIN), which focuses on barrier removals at road/stream crossings. FIN brings Maine's forest landowners together with natural resource agencies, both state and federal, the University of Maine and conservation organizations to discuss research, best



practices, and survey data aimed at improving Maine's fisheries.

The Education Committee has multiple responsibilities. First is to set standards and evaluate logger training programs seeking endorsement by Maine's SIC. The committee also works with Maine Forest Service (MFS) to deliver training to meet needs that are identified by other SIC Committees or through the MFS Harvest Satisfaction Survey, SFI GOAL program, FIN or SFI-certified companies. Providing quality, consistent training is a priority, so train-the-trainers programs are offered to SFI trainers by professionals with adult education expertise.

The Outreach Committee's role is to connect the dots between the sustainable practices and initiatives being implemented with audiences interested in forestry and associated natural resources. This report is produced by the committee and is distributed to the Legislature, natural resource agencies, Maine's 502 communities, as well as to the forest industry and SFI partners.

In addition, the Outreach Committee is involved with specific projects, such as Habitat for Humanity and outdoor classrooms, and events, including Westbrook Community Days, the Maine Snowmobile Show, Tree Farm Field Day, and northern and southern Maine water festivals for 4th, 5th and 6th graders.

Maine's SIC began in 1995. Although our industry looks different than it did 22 years ago, there have been some significant constancies with the existence and operation of the SFI Implementation committee to support certification for 6-7 million forested acres along with most of the larger consuming mills and energy producers in Maine. The resilience of SFI in Maine during that time has been the direct result of the SFI participant's commitment to sustainability coupled with the influence of our valued partners focus on transparency and education relevant to our region's needs.



SFI invests millions in grants, research, and healthier forests. 8

Maine SFI Implementation Committee (SIC)



Wildlife Committee

Promoting forest management to enhance habitat and address issues of concern.



Education Committee

Establishing criteria for logging training programs and evaluating them to insure they're effective.



Outreach Committee

Raising awareness of sustainable practices for landowners industry leaders and the public.



Honor/Integrity Committee

Managing Maine's SFI hotline for questions and concerns about harvesting practices.



Partner organizations

SFI participants, Certified Logging Professional, Maine Forest Service, Maine Inland Fisheries and Wildlife, Maine Audubon, University of Maine, Maine Snowmobile Association, MFS Forester's Institute, Maine Woodland Owners, Maine Tree Foundation, ATV of ME, NELA, NOAA, NRCS, Project Share, USFW.



Partial list of projects/programs

Education Committee: *Harvesting to meet landowners objectives; Bridgemat construction; Stream Smart road crossings; BMPs for water quality; Aesthetics for commercial harvests; Balancing wildlife considerations with forest productivity; Beaver management; Climate change and forest management roads; Temporary plastic roads*

Wildlife Committee: *Works with state and federal agencies to identify best practices for wildlife and habitat; FIN.*

Outreach Committee: *Presentations – Maine Snowmobile Association show, Maine Science Festival, Children's Water Festivals; Harvest Satisfaction Survey promotion; SIC report sent to Maine legislators and municipalities.*



Maine SFI continues its excellent training

By Kevin Doran

Natural Science Educator, Maine Forest Service

In 2002, Maine SIC received a large number of requests for BMP (*best management practices*) workshops, potentially exceeding the capacity of our existing trainers. In an effort to expand available trainers and respond to meet the increased demand for workshops, the SIC education committee developed a Train-the-Trainer (TTT) Program.

This training program started as a way to expand the pool of qualified instructors, supporting both internal company training needs and the need to provide public outreach workshops. We also maintained a consistent, updated and quality controlled program that was governed by the Maine SIC Committee.

The initial train-the-trainer workshop was conducted in 2002 and led by experienced Maine Forest Service (MFS) and SFI trainers, including Roger Ryder, Kevin Doran and Pat Sirois.

Since that first instructor training, the TTT workshops have been held on an annual or biannual basis. The TTT workshops are designed for those interested in becoming trainers, as well as those just looking for a refresher and or to sharpen their skills.

At each workshop, we discuss numerous cutting edge topics, including how adults learn, exemplary presentation/facilitation techniques, usage of eLearning tech-



Kevin Doran teaches a Train-the-Trainer class.

nologies, teaching adult groups in the woods, room layout, and many other considerations when leading forest-based workshops and educational events.

We are fortunate to have a cadre of excellent trainers leading these workshops, including individuals with many years of experience, as well as lead trainers with masters and doctoral degrees in adult learning and education.

The goals of these workshops have been consistent since 2002: Develop and expand a group of highly skilled trainers who understand and practice effective adult teaching strategies, facilitate statewide educational opportunities for loggers, foresters, and landowners using consistent methods, and are easily measured for certification purposes.

Not to rest on our past successes, we are looking to expand our educational programs to include more technology-based learning solutions that will meet the growing needs of a changing workforce.

Stay tuned for exciting developments!

The Maine Forest Service and the SIC constructed this portable skidder bridge (right) as part of a BMP workshop in 2015. Students in the Region Two forestry program recently installed the bridge to cross a small stream on the Hodgdon Elementary School woodlot.



SFI invests millions in grants, research, and healthier forests. 10

CLP is teaching loggers how to stay safe

Technology has transformed Maine's forest products industry as well as the global market. Across the industry, there are fewer workers, but they're more productive, safer, have high-tech skills, make more money and enjoy longer careers than ever before.

The Certified Logging Professional (CLP) Program's mission is to provide the best possible training and education for people in Maine's logging industry.

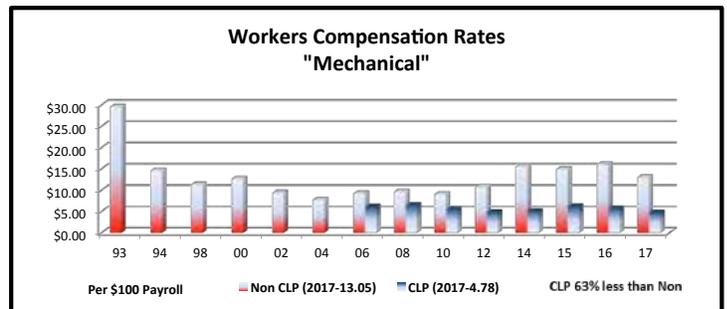
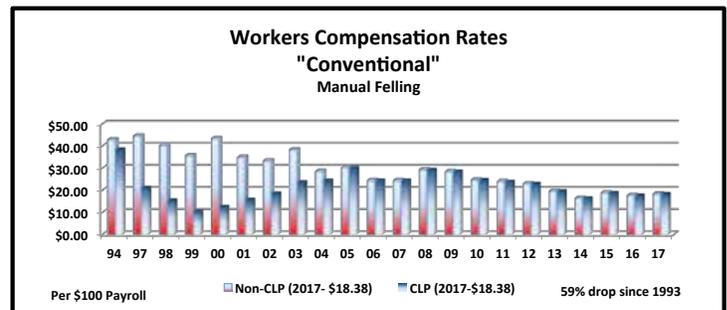
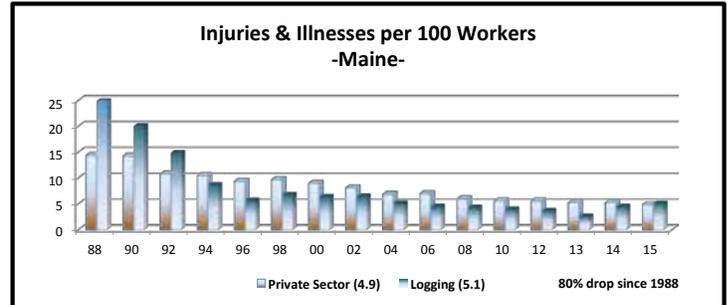
The program was founded in 1991 by loggers, landowners, environmental specialists and safety consultants to establish a standard for professionalism in the Maine woods. An immediate goal was to combat the high rate of logging accidents and the resulting Worker's Compensation costs for logging contractors.

Today, under the sponsorship of the Maine TREE Foundation, the program takes pride in the fact that the accident rate for loggers is less than what it was when the program began. As a result, mechanical certified loggers have earned a Workers Compensation rate less than that on non-CLPs. Equally important, participants have helped CLP meet its overall objective of cultivating skill, knowledge and pride in the Maine woods.

The program is equally committed to recognizing the skill and professionalism of those who meet and exceed the CLP standard. CLP continues to evolve to reflect changes in the industry and provide a means for continued professional growth.

Numbers Don't Lie

Figures from the Maine Department of Labor show a steady decline in the number of logging injuries and illnesses since the CLP program began in 1991. While several factors may have influenced this decline, the program's emphasis on safety, and its requirement that CLPs maintain a high level of skill have played an undeniable role.



Certified Logging Professional summary*		Total (Completed CLP training for 2016)		Total trained**	Projected training 2017	
Participants	Active CLPs	Certification	Recertification	Since 1991	Certification	Recertification
Logging Contractors	190	4	72	670	5	50
Logging Employees						
Mechanical	1102	79	481	2451	60	430
Conventional	195	21	108	2809	10	100
Others (associates)	68	2	35	532	5	20
Total	1555	106	696	6462	80	600

* As of February 2017 **The total number trained does not represent the number of people currently certified.



SFI members contribute \$720,796 to UMaine research

The Cooperative Forestry Research Unit (CFRU) is the foundation for the Center for Research on Sustainable Forestry (CRSF) at the University of Maine. The CFRU has been meeting the applied research needs of Maine's forest landowners and managers for over 40 years.

In 2015 and 2016, 16 of the 35 CFRU members (46 percent) are certified or are supporters of the Sustainable Forestry Initiative (SFI). Seventy-one percent of the total contributions to the CFRU during this period came from these members. In 2015 and 2016, SFI members invested a total of \$375,465 and \$345,331 respectively in CFRU research. In 2015, CFRU Scientists leveraged these contributions for an additional \$264,058 from the University of Maine and other external sources.

Investments in forestry research, science and technology yield knowledge. That's critical for informing sustainable management and policy decisions. CFRU research areas can be broadly categorized on climate change impacts on forest, wildlife and biological diversity. Results from a few CFRU projects are summarized below:

- A multi-year project examining the relationships among forest harvesting, snowshoe hares, and Canada lynx in Maine has been completed, and it is apparent that the extent and distribution of high quality hare habitat will drive the long-term dynamics of hares and lynx across the broader landscape.
- Results from the first year of a three-year project examining the link between commercial forest management, forest habitat characteristics and population performance of spruce grouse indicates that selection by adult females at the sub-stand includes lower tree densities, taller trees and higher densities of saplings during the brooding season.
- Forest bird communities have been found to be most abundant in forests with mature structure (large diameter trees), however, preliminary analysis suggest that both Bay-breasted and Cape May Warblers were associated with regenerating and pre-commercially thinned stands, along with dense canopy cover, high



Dr. Brian Roth

Acting Director, Center for Research on Sustainable Forests, University of Maine

spruce-fir composition and mid-successional stand structure.

- The effects of moose density on forest regeneration was investigated by examining the presence and stocking rate of commercial species in softwood, mixed wood and hardwood stands in Maine; relative damage was highest in hardwood stands and declined with age and by age 30 the majority of trees were non-damaged commercial species.
- Updated depth-to-water table maps were developed for the entire State of Maine using the latest Digital Elevation Model (DEM) coverage and distributed to all CFRU members.
- A 20 meter resolution map of predicted site quality was made for the entire Acadian Forest Region as a function of climate, lithology, soils and topographic features; the products are available on the CFRU website for download. A study quantifying the compositional and structural characteristics old-growth Northern White-Cedar dominated stands was completed and the attributes which best differentiate old- from second-growth stands were identified.

The CFRU is a national model of stakeholder-driven research that has provided critical information to improve forest management and policy across the state and region. Often overlooked is that in meeting its mission, the CFRU also helps develop and train forestry and wildlife management students by providing hands-on real world experience on the most important forest resource issues and challenges of the day.

Through the efforts of the CFRU and the members that support it, these future professionals should be in a good position to take on the future challenges towards the sustainable management of our future forests.

More information about the CFRU can be found at <http://umaine.edu/cfru/>



3-year harvest survey shows satisfied landowners

By Andy Schultz

MFS Landowner Outreach Forester

Nearly 90 percent of landowners were satisfied with the outcome of their harvest, according to an annual survey conducted over the past three years.

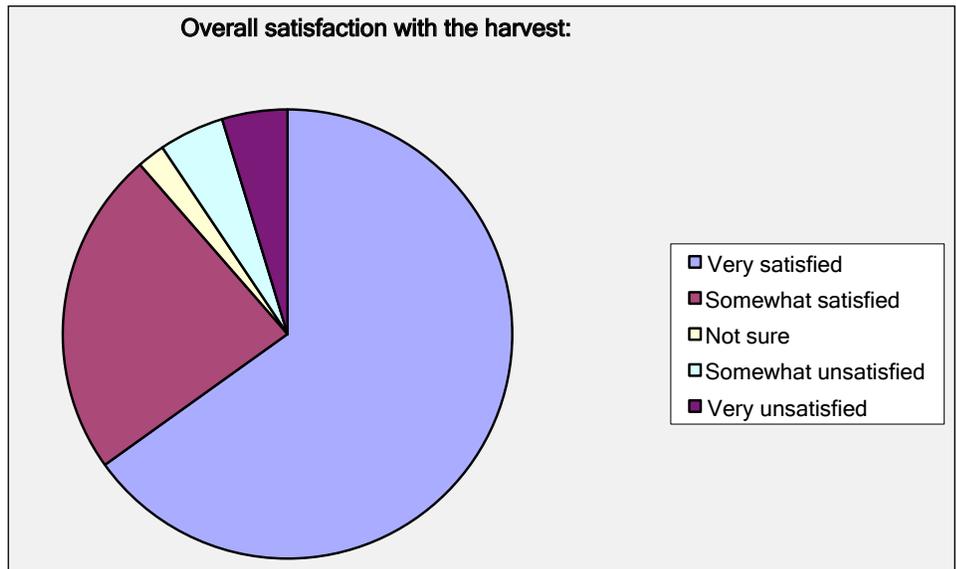
More than three quarters of landowners indicated they are willing to conduct another harvest “when the time was right.”

The survey, with an average response rate of 40 percent, grew from a stakeholder discussion in 2012 about how to empower landowners when they work with forestry professionals. It also led to the creation of the Maine Healthy Forest Program (MHFP) by the Maine Forest Service (MFS), Maine’s SFI Implementation Committee (SIC) and Forest Resources Association (FRA).

According to MFS inventory data, total growth for all species currently exceeds harvest in Maine’s southern eight counties by more than 2:1.

So MHFP’s primary goal is to increase active management on these woodlands by educating landowners about the potential to improve forest health, wildlife habitat, recreational opportunities, water quality, aesthetics, while likely realizing a financial return from harvesting.

Surveys are sent to a statistically val-



id, random sample of small woodland owners who have completed a timber harvest in the previous year. For more information about the survey, please contact the Maine Forest Service at 207 287-8430.

Other components of the MHFP’s outreach efforts include workshops on logging aesthetics, communications and planning, and desired outcomes resulting from a harvest.

Since 2014, the “*Harvesting to Meet Woodland Owners’ Goals*” workshop has been presented in seven locations around the state to loggers, foresters, landowners and public officials with responsibilities for public land and watersheds.

The intent is to remind forests resource professionals of their unique challenge: Satisfying the many reasons – not just timber production – that small woodlot owners have for owning forestland.

Another key element of the presentation emphasizes that many small woodland parcels exist in communities with high population densities. So it’s essential to consider the visual impact of logging on neigh-

bors and the public.

The opportunity for discussion helps forestry professionals learn from each other and see landowners as customers with individual goals and concerns. That, in turn, helps forest professionals succeed in creating satisfied customers.

A condensed version of the workshop also was developed in an effort to reach Maine’s entire logging community. *Harvesting to Meet Landowners’ Objectives* was presented at every Certified Logging Professional (CLP) recertification session in 2014 and 2015, from Gray to Fort Kent, 40 programs in all. This effort reached more than 800 professional loggers.

The full presentation is available to potential sponsors such as loggers, foresters, woodland owners or combination groups. To plan a workshop in your area, contact 207-287-8430 or andrew.h.shultz@maine.gov.

For more information and resources for family woodland owners visit: www.maine.gov/dacf/mfs/projects/healthy_forests/index.html.





What will my woods look like?

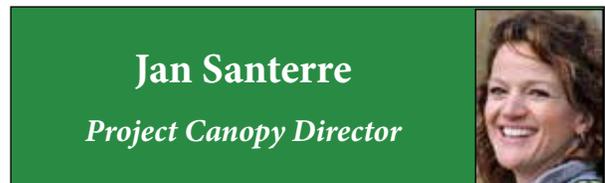
A visual guide to sustainable woodlot management

Most homeowners would want to have a sense of what the kitchen and living room might look like before agreeing to expensive and somewhat permanent renovations getting underway. Forestland owners are no different. Multiple surveys have indicated that aesthetics are really important to small woodland owners in Maine and across the nation.

Many small landowners have little experience with timber harvests and are ill prepared for the visual changes that may occur to the woods next to their fields, along walking trails and out the windows of their homes.

Adding to potential reactions is the rate of which change can occur resulting from the evolution of harvesting systems with highly mechanized and productive machines.

So doesn't it make sense that small woodland owners



Jan Santerre

Project Canopy Director

would benefit from seeing images – before a harvest begins – of what their woods might look like after a harvest?

To this end, the Maine Forest Service (MFS) is developing a visual guide to harvesting family woodlands in collaboration with the SFI State Implementation Committee (SIC), and with photographer and woodlot owner Pam Wells, also designated the Maine Tree Farmer of the Year for 2017.

Funding for this effort made possible by a generous community outreach grant from SFI Inc.



Wells is gathering photos and video illustrating different silvicultural prescriptions utilizing various types of harvesting equipment on 10 different forest stand types through central and southern Maine. The goal is to create series of before, during and after harvest photos for print and websites.

Representative stands of Maine woodlands will be annotated with language for forestry novices and also for those experienced with the terminology used in silvicultural prescription/recommendations.

During the next two years, the guide will also serve as a foundation for educational and training programs aimed at family woodland owners, managers, and operators.



Small woodland owners would benefit from seeing images of what their woods might look like during and after a harvesting operation.

The MFS and SIC will offer up to 10 workshops based on case-studies highlighted in the guide covering a range of successful family woodland operations, and will be delivered statewide through MFS field staff and local partner organizations.

The project will essentially be a visual translator for forest management plan prescriptions, and also will answer the question so many woodland owners was answered: “What will my woods look like if I go ahead with the proposed timber harvest?”

SFI coordinates safety training for migrant workers

Several SFI certified landowners conduct silvicultural exercises each year that includes tree planting and pre-commercial thinnings. The tree planting is intended to get preferred species on desirable soils and the thinnings to space out young overcrowded stands that helps increase growth rates. This work is very labor intensive and essentially performed by hand with little to no mechanize equipment involved.

For decades this work has been performed by migrant laborers, from countries such as Guatemala and Honduras, who work for contractors that provide these silvicultural services for Maine landowners.

Due to the significant turnover in the workforce year to year, and the uniqueness of Maine's private roads network, landowners have required silvicultural contractors to send workers to a safety training.

The training is paid for by SFI landowners and delivered by a contractor who is fluent in Spanish and also qualified to teach CPR and driver's education. Other topics include brush saw safety, and "rules of the road" for the north Maine woods.

The SFI education committee is charged with coordinating the delivery of this training. Since assuming this role in 2014, more than 120 migrant workers have attended this training delivered at the northern Maine forestry center in Presque Isle.

Two landowners in particular, Seven Islands Land Co., and Irving Woodlands, have taken the lead in helping to manage logistics. Funding for this training is derived through assessments on landowners based on the number of acres treated each year.



Priscilla Doel (center), professor emerita of Portuguese and Spanish at Colby College, teaches a recent safety class.



Weighing risks, benefits of carbon credit programs

By Alison Truesdale, Coordinator
Keeping Maine's Forests

Maine's SFI Implementation Committee (SIC) has collaborated with Keeping Maine's Forests (KMF) to study participation of Maine's SFI-certified landowners in carbon credit programs.

Forestlands must be certified as sustainably managed to be eligible for the California carbon credit market, and millions of acres of Maine's commercial forest lands are enrolled in the SFI program, yet none have enrolled in potentially lucrative carbon credit programs. The KMF study enlists the expertise of a panel of advisors from the University of Maine's Climate Change Institute, Maine land managers and forestry experts, and a professional carbon project developer to find out why.

California has the dominant cap-and-trade carbon credit market in North America, paying the highest prices for forestry projects that offset carbon emissions from the state's industries. Quebec has linked its program with California's so that Canadian landowners can obtain credits in the California market, and Ontario is in the process of doing the same.

The Regional Greenhouse Gas Initiative (RGGI), which includes the New England states, Delaware, Maryland and New York, has regulations in place to accept forestry offsets projects and has adopted California's forest offset protocols. However, RGGI's price for forestry offset projects has not been competitive with California's, and so far, no one has sought carbon credits for forestry projects in the RGGI market.

To date, the California Air Resources Board (ARB) has issued approximately 57 million offset credits, including 65 percent for "improved forest management projects." From 2013-2020, as many as 200 million total offset credits have been or may be demanded by California industries to meet their greenhouse gas emission caps.

Assuming forestry continues to account for the same percentage of issued offset credits, almost 93 million credits may be in demand from forestry projects between now and 2020.

Current offset prices are around \$10 per credit, with



projections in the low to mid-teens by 2020. Even if the price stays at today's \$10 per ton, all registered forestry offset projects now until 2020 are potentially worth nearly one billion dollars.

KMF surveyed Maine's nine SFI participants to find out whether land managers had looked into obtaining carbon credits, and if so, what factors had weighed in their decision to move forward or not. Of the seven respondents, all of them had carefully considered getting carbon credits through the California market, but had decided against it, at least for now.

While the upfront payout from carbon credits is substantial and a good way to diversify income from forest land, the land managers decided because of costs, risks, and the 100-year commitment required, the carbon projects aren't worthwhile at current credit prices.

Project carbon stocks are measured against a baseline — the average carbon stocking in the ecological region in which the project lies. Credits are issued for carbon stocking above this baseline, and, if the landowner wishes, for future tree growth.

Projects are required to maintain a stable or increasing level of carbon. In order to document, verify and track this carbon, the ARB has rigorous standards for measurement, modeling, inventories, and verification audits.

SFI participants have the staff, software, record-keeping and systems for designing and maintaining a carbon project over 100 years, but the auditing processes for SFI certification and carbon project verification are not similar, so these processes represent additional costs for landowners. Landowners are at risk of having to pay back credits, sometimes with an additional penalty, if



In the U.S. & Canada 285 million acres are certified to SFI standards.

the land's carbon stocks decline due to harvests.

From 16 to 19 percent of a project's credits are automatically transferred into an insurance pool, which fully covers carbon losses due to unintentional declines in carbon stocks from weather events, wildfire, and insect, disease, and pathogen outbreaks.

It is not clear, however, whether pre-salvage harvests related to spruce budworm infestation would be covered. Given that landowners in Maine can expect two to three spruce budworm outbreaks over the course of a 100-year project, this lack of regulatory clarity represents a substantial risk to current and potential program participants.

The ARB regulations are in effect until 2020 and allow regulated entities to obtain offset credits through November 1, 2021. While the California legislature has

committed to a further reduction of statewide greenhouse gas (GHG) emissions to 2030, the cap-and-trade and offset programs have not yet been renewed and the program's continuation is still being debated.

There may be opportunities to influence Quebec and Ontario's GHG reduction programs to facilitate SFI certificate holder participation. Other Canadian provinces, including New Brunswick and Nova Scotia, are also considering adoption of market-based greenhouse gas emission reduction regulations and programs.

In the meantime, carbon credits are a viable option for landowners whose forestland portfolios have areas with high carbon stocking that can be maintained over the long term. Higher credit prices or poor wood markets could also tip the balance of considerations in favor of improved forestry management projects.

SFI awards pilot grant to Manomet Resiliency Assessment Framework

The Manomet Resiliency Assessment Framework (RAF) is intended to improve the ability of forestry professionals to identify climate change and forest response trends and to integrate that information in forest planning and management.

Manomet's project will document the climate resiliency benefits provided by lands certified to SFI through a set of comparisons of growth rates and forest health metrics between SFI lands and surrounding forests.

The RAF has three main components:

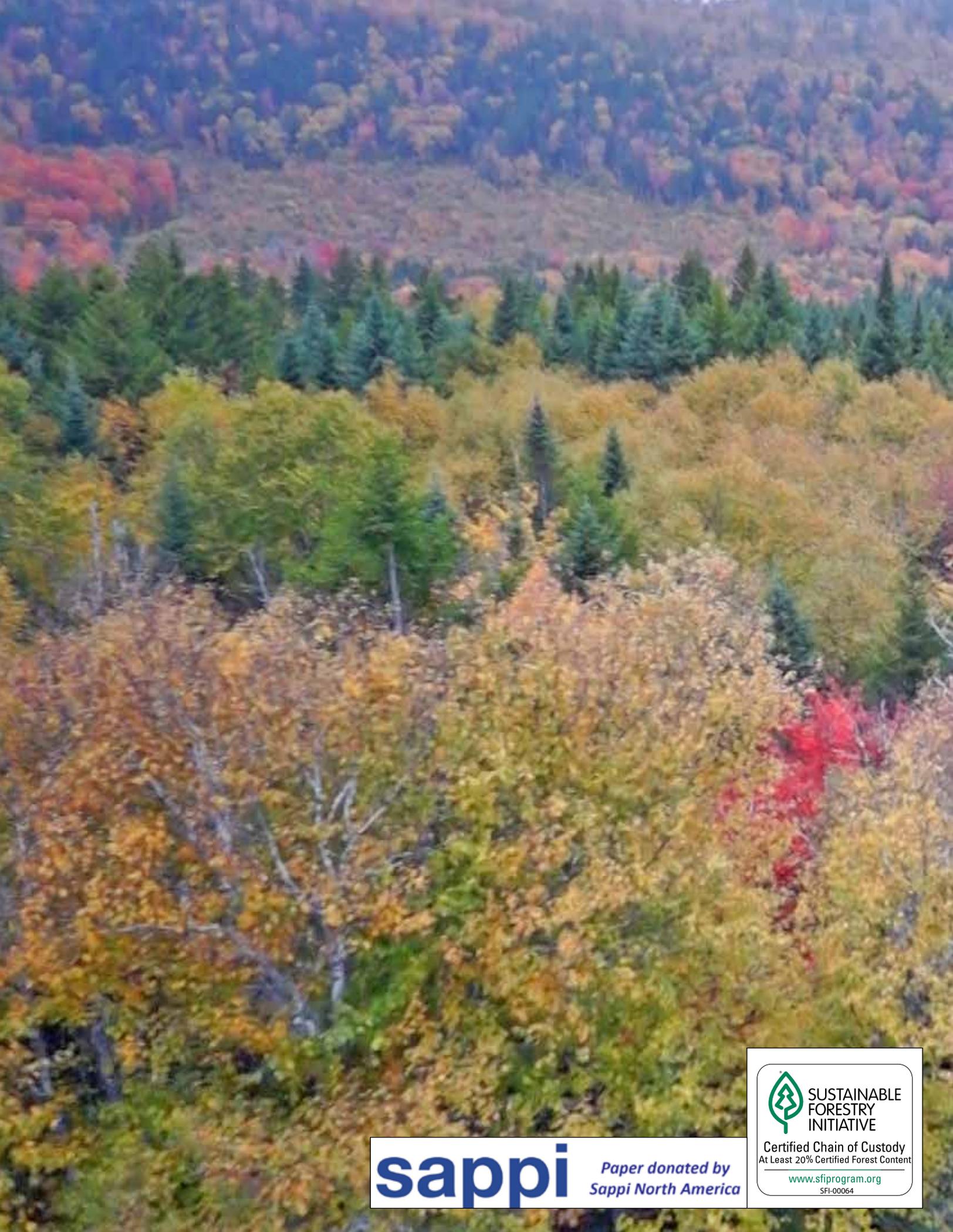
A regional synopsis of climate change and forest response trends and projections,

Site-specific monitoring to determine the extent to which local conditions are tracking or deviating from regional conditions.

A climate-change component for forest management plans that links to the monitoring data and modeled projections. Manomet will be piloting this effort over the next three years with funding from SFI.



SFI manages the world's largest single forest certification standard.



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