

Graduate Students





Stephanie Adams

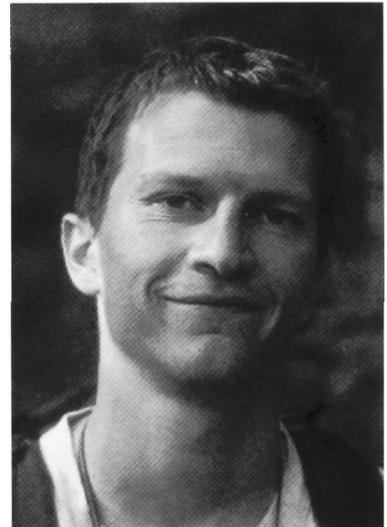
M.S. Student in Forest Ecosystem Science

Thesis topic:
Age-related decline in the photosynthesis of red spruce

Volker Bahn

Ph.D. Student in Wildlife Ecology

Thesis topic:
The role of dispersal and autocorrelation in shaping animal distributions



Elizabeth Baldwin

Ph.D. Student in Parks, Recreation and Tourism

Thesis topic:
A critical analysis of the proposal for a Maine Woods National Park and Preserve in Maine's industrial forest



Fredric Beaudry

Ph.D. Student in Wildlife Ecology

Thesis topic:
Road mortality risk for Spotted and Blanding's turtle populations

Sean Blomquist

Ph.D. Student in Wildlife Ecology

Thesis topic:
The effects of habitat alteration on amphibian fitness, habitat selection and movement



Sarah Butler

M.S. Student in Forest Ecosystem Science

Thesis topic:
The disturbance history and stand dynamics of the Coweeta Basin,
North Carolina



Steven Campbell

Ph.D. Student in Wildlife Ecology

Thesis topic:

Long-term effects of a group selection timber harvest on the bird community of an oak-pine forest in Maine

Jennifer D'Appollonio

M.S. Student in Forest Ecosystem Science

Thesis topic:

Regeneration strategies of Japanese barberry (*Berberis thunbergii* DC) in coastal forests of Maine

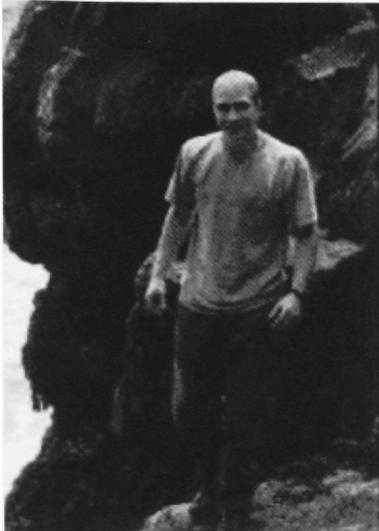


Kristen Hoffmann

M.S. Student in Forestry

Thesis topic:

Land use history and forest succession on Long Island, Maine



Philip Hofmeyer

M.S. Student in Forest Ecosystem Science

Thesis topic:
The sustainability and leaf area/growth efficiency of Northern white-cedar through Northern Maine

Suming Jin

Ph.D. Student in Forestry

Thesis topic:
Multi-temporal and multi-sensor monitoring of forest disturbance



Allison Kanoti

M.S. Student in Forest Ecosystem Science

Thesis topic:
A dendrological study of Balsam Woolly Adelgid damage in relation to climate and site factors in Eastern Maine





Keith Kanoti

M.S. Student in Forest Ecosystem Science

Thesis topic:

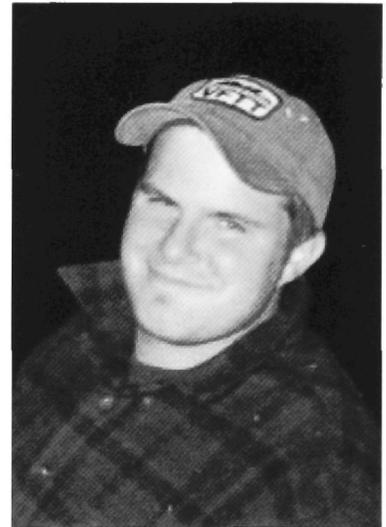
Factors influencing the germination, emergence and early survival of native and exotic tree species in the Acadian forest

Spencer Meyer

M.S. Student in Forest Ecosystem Science

Thesis topic:

Leaf area as a growth predictor of *Abies balsamea* and *Picea rubens* in managed stands in Maine



Elizabeth Munding

M.S. Student in Parks, Recreation and Tourism

Thesis topic:

Tourism stake holders envision



Pilar Palacios

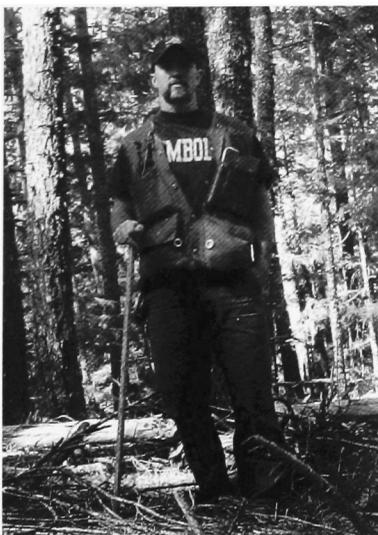
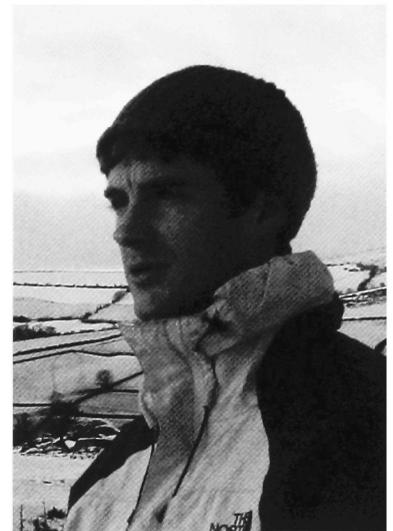
Ph.D. Student in Wildlife Ecology

Thesis topic:
The response of Maulino forest amphibians to exotic pine plantations.

David Patrick

Ph.D. Student in Wildlife Ecology

Thesis topic:
Land-use effects on the mechanisms driving juvenile amphibian dispersal: closing the dispersal loop



Tom Perry

M.S. Student in Forestry

Thesis topic:
Wind disturbance



Natalia Politi

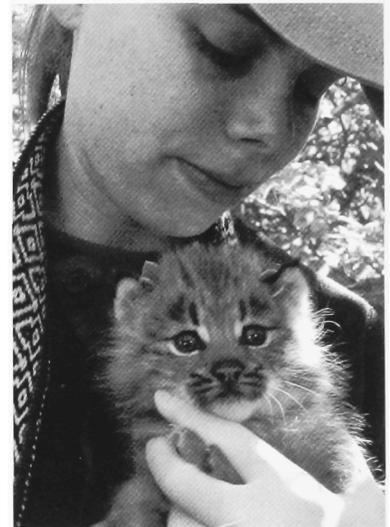
Ph.D. Student in Wildlife Ecology

Thesis topic:
Using cavity nesters to inform sustainable forestry in Montane Forests of Argentina

Laura Robinson

M.S. Student in Wildlife Ecology

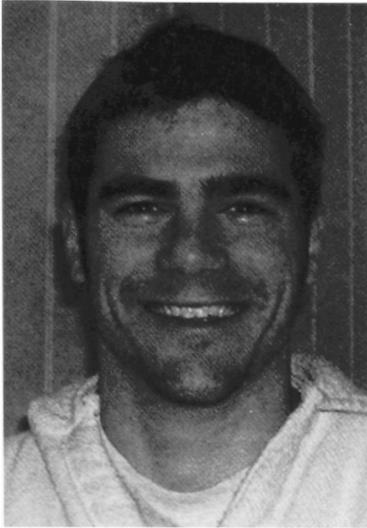
Thesis topic:
Effects of Snowshoe Hare density and landscape characteristics on habitat use by Canada Lynx in Maine



Emily Schillings

Ph.D. Student in Ecology and Environmental Sciences

Thesis topic:
Landscape attributes and invertebrate communities of fishless lakes in Maine



Brian Schneider

M.S. Student in Forestry

Thesis topic:

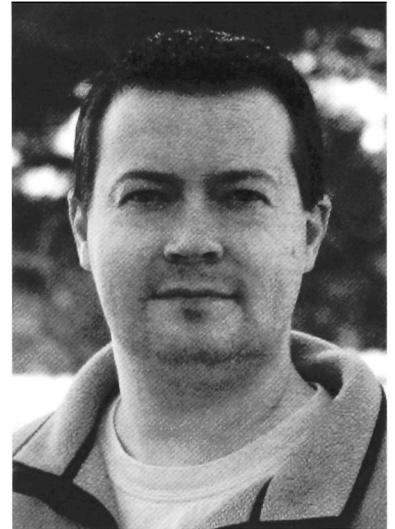
An assessment of the interest level among Maine's non-industrial, private, forest landowners regarding cooperative associations and management alternatives for the purpose of landscape level ecosystem management and local, resource-based economic stability

Kenton Williams

Ph.D. Student in Forestry

Thesis topic:

Methods of intergrating digital photogrammetry with satellite change detection techniques for monitoring of conservation easement lands



Xinfeng Xie

Ph.D. Student in Wood Science & Technology

Thesis topic:

Carbon and carbon composites using wood as a precursor



Xuelian Zhang

Ph.D. Student in Wood Science & Technology

Thesis topic:
Improved adhesive system for wood-strand-based composite

GRADUATE STUDENTS NOT PICTURED

FTY

Oscar Bustos
Katharine Locke
Jason Lyle
Silvia Cordero Sancho
Jesse Studley

FES

Damian Cirelli
Justin Crouse
Robert DeRose
Peter Kenlan
David Ray
Andrew Reinmann
Justin Waskiewicz

WSC

Diogo Baptista
Ryan Mills

WLE

Rebecca Chalmers
Thomas Danielson
Katie DeGoosh
Angela Fuller
Jeremiah Hayden
Stephen Kneeland
Jennifer Kurth
Jon McCloskey
Jordan Perkins
Dianna Queheillalt
Erin Simons
John Skinner
Carol Strojny



APPLICATIONS OF GENETICALLY ENHANCED TREES

BY KATHY CARTER

ASSOCIATE PROFESSOR OF FOREST RESOURCES



Advances in the understanding of plant genetics and plant propagation over the past few decades have led to the widespread application of genetic engineering in several types of annual plant crops. For example, within the past few years the use of genetically engineered soybean plants (primarily those with an introduced resistance to glyphosate herbicide) has become widespread in the United States, to the extent that now well over half of the soybeans grown in this country are engineered to carry the herbicide-resistant gene. Are we likely to see similar applications of genetic engineering applied to forest trees? Let's look at some of the possibilities.



First, it's important to understand that genetic engineering is completely different from the traditional types of plant selection and breeding which have been applied to trees for many decades now. Traditional tree breeders select and propagate individual trees of a particular species that have favorable combinations of characteristics. They do not directly modify the genome of the tree, or introduce new genes from other species of plants or animals. The selected superior trees may be propagated by seed (in seed orchards) or clonally using rooted cuttings or tissue culture plantlets. These

traditional tree breeding techniques are now widely applied to trees and generally well accepted by forestry professionals and the public.

Genetic engineering, however, seeks to identify useful genes from other species and insert these into the genome of the "enhanced" tree, or to directly modify the expression of existing genes. Some applications of genetic engineering which have been suggested for application to trees include the introduction of genes for insect resistance or herbicide resistance; modification to reduce the expression of lignin-producing genes; and re-designing tree architecture to maximize the production of useful wood and reduce the size of "uneconomic" structures such as branches and roots.

Due to their woody cell walls and long lifetimes, the application of genetic engineering techniques to trees presents some unique difficulties as compared with annual plants. However it seems likely, given the rapid development of gene engineering technology, that technical problems associated with genetic engineering in trees can be overcome. The larger question may be, will genetically engineered trees become widely planted in forestry applications? David South, an authority on forest production in the southeastern US, argues that given current prices for pulpwood, the extra expense associated with planting genetically enhanced southern pines makes them unprofitable under current conditions. (For more information, check out South's very interesting comments at www.forestry.auburn.edu/sfmc/class/getrees.htm) In addition to economic realities, various types of public and political pressures in the US seem likely to limit the deployment of genetically engineered trees. Eco-terrorists have vandalized laboratories and research plots associated with them; and sustainable-forestry certification groups generally prohibit their use. Unless these types of economic and social barriers are overcome, genetically engineered trees are not likely to find widespread application in forestry in the US.



Quotable Quotes

Faculty & Staff

“Tre(e)hugger is Norwegian for logger.”

- Dave Field

“It’s a crap shoot.” - Al White on seedling growth and survival

“And so on and so forth.” - Dave Field

“Toast my top.” - Al Kimball

“It just crushes the hell out of it.” - Dave Field

“Jake and Rory are right, and Greg is off the mark.”
- Al Kimball

“And that’s total bulls**t.” - Dave Field

Al on? : “You just have to make sure the holes are small enough that the piglets don’t get through.”

“And the Dean was pissed.” - Dave Field

“It’s not chopped liver.” - Dave Field

“It is going to take energy; like trying to take candy from a baby, or a beer can from a student.”

- Dr. Livingston

Al: “So Imagine you’re the pilot of this helicopter and they tell you that you have to drop this 250 gallon bucket into a boghole and fill it, what’s the first thing you absolutely want to have?”

Maggie: “Bug spray?”

“Invented in Canada, for that kind of stuff.”

- Dave Field

“Some people get on me for multi-tasking, like brushing my teeth and using the urinal. People need to understand that there are only so many hours in a day.” - Dave Field

“I used to bring back cases of Coors beer, until I decided it wasn’t worth drinking.” - Dave Field

“You’re Easterners, that’s the problem.”
- Al Kimball

“Paper coated Rubbermaid Hertz rental car.”
- Dave Field

“If you really want a good grade, you need to taste your wood. Ask Dr. Jagels, he recommend it.”
- Barry Goodell

“I mean, I’m really old.” - Dave Field

“Oh, oh, I’m sorry, I’m in the past here”
- Dave Field



Trying hard to be cool.

Quotable Quotes

Faculty & Staff

“I would peg him back around 2000 B.C. in science.” - Dave Field

“The name of this class is ‘I-Remember-Everything-And-I-Wanna-Prove-It’ ”
Tom Brann

“The State has no control, only the Lone Ranger and Tonto can enforce those laws.” - Dave Field

“That’s dangerous, bad ass, bulls**t!”
- Al Kimball

“There was a second one hired and naturally we call him Tonto.” - Dave Field

“You could go up to a pretty girl and say, ‘Hey, I’d like to take some jitterbug lessons with you.’ - Ben Dresser

“Cindy, if you can’t control yourself you can’t have another drink.” - Dave Field at Egan’s party

“NASA’s got nothing on the human body.”
- Al Kimball

“They get a little fussy about that, no more two martini lunches.” - Dave Field

“You can’t always roll something downhill.”
- Warren Hedstrom

“You expect a range of things from Vermont.”
- Dave Field

“Whoops! The machine fell asleep while I was talking, I guess that doesn’t speak well for me.”
- Dave Field

“Birds are just lobsters with feathers.”
- Al Kimball

“I’m going to shut the lights off, if I lose you try not to snore.” - Dave Field

“Burnt regen...it’s like burnt baby bunnies.”
- Al Kimball

“Somebody start whistling the theme to *Close Encounters*.” - Dave Field

Bob Seymour on how using forwarders and in-woods de-limbers are better than grapple skidders:
“It’s like, HUGELY better.”

“We will now add to the list of ‘Clever things by Dave Field’” - Dave Field

“How many horsepower is it?”
Warren Hedstrom on any piece of equipment out there, be it margarita blender or harvester

“I agree to allow you to use the most remote one acre of my woodlot to grow marijuana.”
- Dave Field

“This is the Louis Meter (holding up a stick). This next one is a bit shorter, and this one is perfect (holding up a long stick), because I wish I was bigger.” - Louis Morin

“You could operate out of your bedroom at your folks house if you wanted...not a good idea.”
- Dave Field

“The F word is used... fraud, leading to the second F word, felony.” - Dave Field

“That curve isn’t linear.” - Al Kimball

“This tells you... well I don’t know what this tells you.” - Dave Field

“If you don’t like your lab partners, just shoot them” - Louis Morin

Quotable Quotes

Faculty & Staff

Bob Seymour on age-diameter relationships:
“They’re based on a quick ‘n’ dirty sample.”

“Canada worries a lot about annual allowable cut, I worry about the light conditions in this room.”
- Dave Field

“If you get this wrong, I’ll shoot you.”
- Ivan Fernandez

“If you’ll fight that fire with an Indian tank, then we’ll send you to Alaska, to find a polar bear with a sharpened stick.” - Al Kimball

Al on Scaling: “Could I sell a log by the orange? Yeah, if I had a stick with orange on it.”

Later in class: “The ‘truck’ with the extended cab with doors and the box in the tire wells that can hold 3 buckets of sand, those should be sold by the orange.”

“Just think of glucose as a big cooler of beer.”
- Dr. Livingston

“I was sitting in a barbershop in Gorham New Hampshire, about forty years ago...”
- Dave Field

“You need to worry a lot about bad things happening.” - Dave Field

“We were talking about sex and alcohol I believe.”
- Barry Goodell

“If lawyers are ethical, well we expect them to be.”
- Dave Field

“Everybody is signed up for the first lab on Friday, except John Pinnette, cause he is special.”
- Dave Field

“Sacrifice to science.” - Lech Muszinski after breaking a window blind in Nutting



Umm, the picture speaks for itself.

Quotable Quotes

Faculty & Staff

“I don’t know much about car engines.....sure there’s nasty combustion byproducts, but that’s the American way. You can’t see it so it must be ok (that’s the American way too).” - Al Kimball

“Environmentalists are hell to live with, but they make great ancestors.” - Brett Vicary (VP of timberlands for Sewall) at NESAF

“If we have a real fire, just jump out of the window.”
- Barry Goodell

“I am a native of Augusta.” - Dave Field

“This is a tree, these are people.” - Dave Field

“It says Spring 2004 on the handout, but don’t worry, nothing ever changes.” - Dave Field

“The solution to pollution is dilution.”
- Al Kimball

“They are from Maryland, and well, they are different down there.” - Dave Field

“Humans are like moths, so it’s a good thing we don’t have wings.” - Al Kimball

“This is the one that I sit at the table with my rifle and say sure you can.” - Dave Field

“The entire purpose of this law is to make it easier to blow away deer.” - Dave Field

“How do we label him? Environmentalist? Wacko?”
- Dave Field

“The geezers are going to dominate.”
- Dave Field

“Smart people have egos.” - Dave Field

“And don’t talk to the guys growing the marijuana, unless he is a relative and you are an old customer.”
Tom Brann

“I’ll see Ted next week and I’ll ask him what he was smoking when he wrote this.” - Dave Field

“You get these printouts and it says do trees.”
Dave Field

“The trajectory of an acorn is spelled T-H-U-D.”
- Al Kimball

Dave Field: “It’s entitled ‘Pain and Pleasure’ ”
Ross B.: “Alright!”
Dave Field: “No Ross, it’s not that kind of book.”

“As I read these, your eyes will surely glaze over.”



Al finally proves he can catch fish.

Quotable Quotes

Faculty & Staff

“This is the default, except I have changed it.”
- Al Kimball

“National sales tax is harder to evade than an income tax, which seems to be a national sport in Europe.” - Dave Field

Bob Seymour on the seed tree method of regeneration:

“...seed tree can work spectacularly, when it works.”

“If you take a tax map and it fits, something is wrong.” - Al Kimball

Tom Brann: “It needs to be precise to the diameter of a gnats ass.”

Nottermann: “That’s a Forester quote.”

Tom Brann: “Sh*t.”

“Are they hustlers or losers?” - Dr. Rice

“You can drop a lodge pole pine on someone, and it won’t hurt them much cause they are all bushy.”
- Dave Field

“Did you ever get into a discussion with someone where you know what they ought to know?”
- Al Kimball

“To quote a former colleague, ‘All you have to do is die’” - Dave Field

“If you have read the material and come to class, along with a few other improbable assumptions, the test won’t be hard.” - Dave Field

“I have *another* handout here.” - Dave Field

“Cut a tree, get a hugger.” - Dr. Rice

“Ed, you are smiling, take this seriously.”
- Dave Field

“Speaking from personal experience, it is never a good idea to stand up in front of a law enforcement group and tell donut jokes.”

- Dave Field

“I hope it wasn’t when I had my finger in my nose.”
Dr. Rice

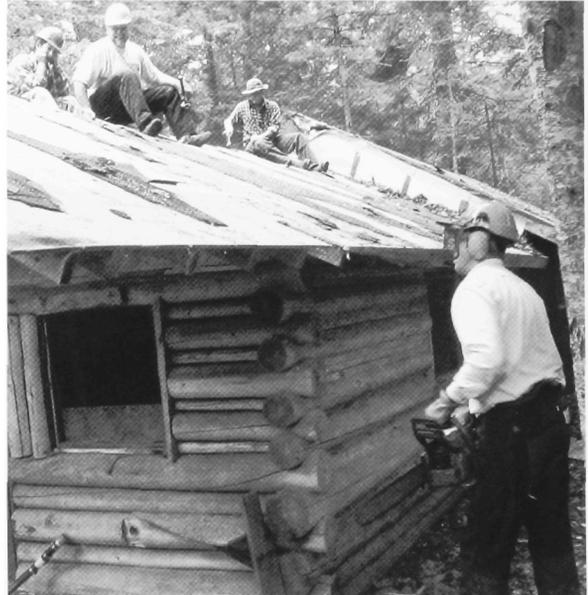
“Moisture content: the sizzle factor.”

- Al Kimball

“It’s not the only class that you may be inclined to snore in.” - Dave Field

“Soils creep doesn’t necessarily mean your soils instructor.” - Ivan Fernandez

“I’ll design it so anybody can do it, even you Ben.”
- Dave Field



The day Dr. Field finally had it with his wise cracking students

“Why don’t you look like this? Because you are not on drugs.” - Barry

Quotable Quotes

Faculty & Staff

“You aren’t the brightest group I’ve ever taught, but you’re all real good guys.” - Dave Field handing back an Economics test

“... the skinny zillionth of a mouse’s whisker.”
- Al Kimball

“Which plan will pad my golden parachute when I bail out as a loser?” - Dave Field

“Past tense wildlife - sad.” - Al Kimball

“Since Benjamin Nottermann is not here, I’m going to pick on someone else.” - Dave Field

Dave Field: “You must all have read chapter 9.”
Ross C. : “Um, no.”

Al: “Cooking a hot dog is like shooting a dead rabbit...”

Maggie: “Yeah, it makes us feel good.”

“Wood is really the perfect building material for Mars” - Lech Muszinski in Mechanical Properties

“I have three rifles and two shotguns, if I don’t get my way... well, you may read about it in the paper.”
- Dave Field

Bob Seymour on how silviculture is NOT a cookbook:

“If you’re going to follow a cookbook, you might as well become a forest technician and stop thinking.”

“There’s no such thing as bad poop.”
- Al Kimball

“Spotted owl tastes a lot like spruce grouse, you need a lot of baking soda to get the taste out of your mouth.” - Dave Field

“Sometime over a beer, I’ll tell you how we did cut that.” - Dave Field

“It’s a good thing I’m not a terrorist.”
- Al Kimball

“We had to snowshoe up hill both ways, well you have heard the rest.” - Dave Field

“Florida’s a special thing. I’ve been hearing things...”
- Al Kimball

“We can’t even call them hypocrites. I mean, that implies that they have a clue” - Dave Field at NESAF on the general populations use of products and beliefs of forestry

“If you can light it in six places...well, HELL!”
- Al Kimball

“In past years, IP has been my favorite joke.”
- Dave Field

“Robin doesn’t come sing in my singing spot.”
- Al Kimball

“I can think of cutting a tree as a very small clearcut.” - Dave Field

“Material Science is a waste, waste.....wait, how do you say.....Oh yes, vast, vast field.”
- Lech Muszinski in Mechanical Properties

“The Shadow knows. BWAHAHAHAHA.”
- Dave Field

“Lick ‘em off and they’re going!” - Al Kimball

“There’s all that, like, stuff.” - Al Kimball

“I’m spatially challenged.” - Dave Field

Quotable Quotes

Students

“If you see them in the bathroom, corner them and BAM!” - Rory Eckardt



“I have a lot of things and people to do today.”
- Rose Graves

Lisa: “Cosmo is in a classification all its own.”

Adam Nicak: “What’s Cosmo?”

Wil Mercier: “Adam you know the magazine racks at the checkouts in supermarkets and how there is one that looks like a porn but isn’t... That’s Cosmo.”

Adam Nicak: “REALLY? (Looks at Lisa) Do you have any of these (Quote gesture) Cosmo?”

Bob Cousins: “My ferret could drink beer from a can. My sister got a ferret too, but it got sickly towards the end.”

Katie Manende: “From the beer?”

Bob Cousins: “No, hers didn’t drink, mine was a lush.”

Adam Nicak: “Why did she just throw her sweatshirt on my head?”

Wil Mercier: “I think its because she wants you to shut up.”

Adam Nicak: “Does that mean if I keep talking she’ll take more of her clothes off?”

“I’m pretty.” - Ben Martinelli

Chandler Buie to Rory Eckardt: “You are the Britney Spears of Nutting.”

Katie Manende: “What is gleyed?”

Bob Cousins: “The stuff you spray in the bathroom when you smell?”

“Just pull out your pinky prism.” - Ross Congo

“You know all you really need is someone with clean hands and a knack for meat.”

· Matt Kasson

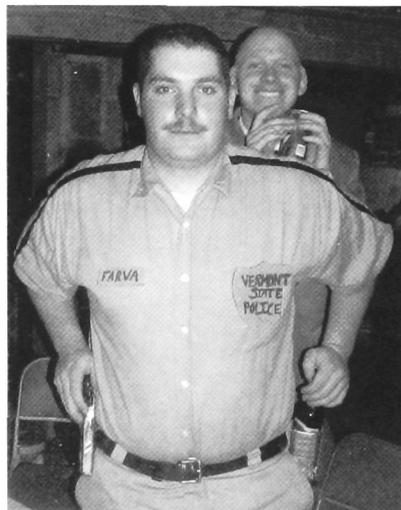
Rory Eckardt: “What are you doing with regeneration data, anything?”

Hugh Violette: “Putting it right in the garbage.”

“I think I would rather run through a cornfield backwards with my pants down, than do that internship.” - Simeon Allen

Adam Bither to Adam Nicak-

“These girls are all dressed up, and I’ve been checking you out all night.”



“So there I was time to write a postcard”
- Darren Cole

Quotable Quotes

Students

Audie Arbo on the course evaluation on AI's Fire Class: "There were objectives in this class?"

"Check this out....I DON'T FIT IN MY SHOWER!" -Ben Martinelli



"The red headed double breasted mattress thrasher. We have found two that co-habitate. They are fine specimens." - Bob Cousins and Adam Nicak

"It knows no matter how much you whack it, it will always come back."
- Adam Nicak on FVS and red maple

Emily LaPlante: "You may have to straddle the thingy a bit."

Katie Manende: "Oh, I've done that."

"The test is over AI!" - Maggie Burke

Josh Bubier to Pete Rosen, while both working on their management final write ups:
"Want a lap dance?"

"The fecal matter will hit the whirling blade, and let me tell you, it will fly far." - Chandler Buie

"Gaaahhd, I hate being ugly." - Darren Cole

"I like writing in red ink, it makes me feel powerful."
- Hugh Violette

"I'd rather take shots of vodka than drink water from that fountain." - Josh Bubier

"I'm gonna get my notebook out so it looks like I'm learning." - Pete Rosen



Rory Eckardt: "What are two types of stumpage sales?"

Ben Nottermann: "Lumpage."

"I don't need a whore, I need new skivvies."
- Adam Nicak

"That FLEX program is like a *Choose Your Own Adventure* book, you never know how it will turn out in the end." - Greg Hutchinson

"Louis (Morin) would call that random error."
- Brian Curry

"I know that the spotted owl is endangered, but other than that what makes them so special?"
- Matt Avery

"Not to be stereotypical or anything, but..."
- Ross Banach

Quotable Quotes

Students

“When I was in elementary school I used to wear tighty whities, and when I’d come home it looked like I’d been mud wrestling. I was accurate, I always made the same spot.”

- Bob Cousins

“Did you just call me a tea toodler?”

- Rory Eckardt

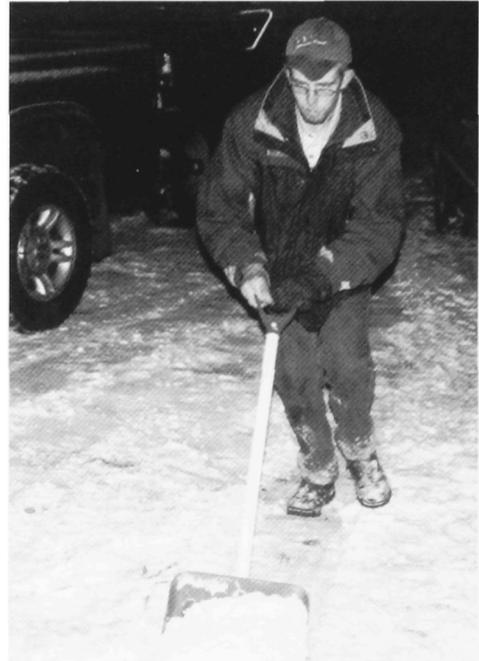
“You guys are all over the flannel, I’m all over the Cosby sweaters.” - Ross Congo

“Just measure 6 inches up from the crotch because that is where all your merchantable wood is.”

- Darren Cole on timber trespass

Bob was drunk again...

Bob Cousins: “I know why Mabel is turning yellow, she thinks she’s a Maple. She wants to loose her leaves. (Turning to Mabel) Pine trees aren’t deciduous! (Turning back) She did loose a needle.”



“I always liked the kids who did drugs, they were always coooool.” - Maggie Burke

“Tom do you want to stuff my turkey?”

- Lindsey Fenderson



“We have a man down.” - Ben Nottermann

Student Summer Job Articles





A SUMMER ON PETIT MANAN ISLAND

BY SARAH SPENCER

WILDLIFE ECOLOGY



It's been five days since we've been out of the house; the fog is so thick that we can't see the lighthouse, and we're so sick of playing cards, we're going crazy. Welcome to Petit Manan Island (PMI), owned by the US Fish & Wildlife Service, home to five research technicians and

more than 3,600 nesting seabirds.

When I first reached PMI, it was a beautiful day. My first thought as I stepped onto the island that would be my home for 10 weeks was: Uh oh! I thought the foghorn was going to drive me insane: two second blasts every 28 seconds, 24 hours a day, after I settled in and learned the daily routine I didn't even notice it. Unfortunately, we were fogged in for three days after my arrival, so I spent my first few days getting to know the other technicians, and practicing how to tell the terns apart. These were three of the 42 days of fog while we were there.

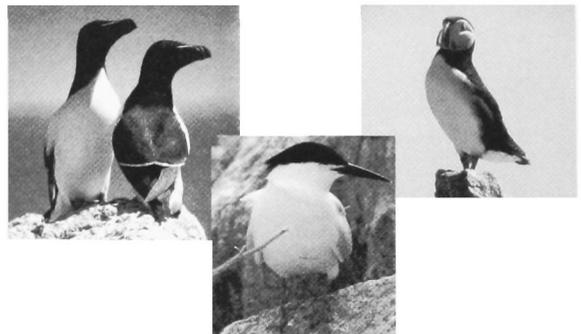
Finally, the fog lifted and it was time for "work." Our work varied throughout the season, but some of the things we did were island-wide tower counts twice a day, two hour stints of band reading, many hours of flagging nests, building fenced enclosures called productivity plots, trapping adult Arctic Terns, counting eider crèches, and three hour provisioning stints to look at fish being brought to chicks. We also made special measurements and banding for Roseate Terns, Atlantic Puffins, and Black Guillemots. On most evenings, we enjoyed line dancing, stories, music, quilting, crocheting, playing croquet, and enjoying solitude.

When the chicks started hatching, adults became very defensive. I realized why they told us to wear our worst clothes: TERN POOP! The terns that nested on

PMI used poop and dive-bombing methods to get you away from their nests, which make for an urgent request for hard hats to prevent injury from tern impacts. Chicks were each given bands with an ID#, depending on species.

Most days, we performed a morning tower count, and by noon it was foggy again. Thank goodness for mail days, when large quantities of hot chocolate and tea arrived. We were very fortunate to have the entertainment of tourists from the Friendship V, of Bar Harbor, who called us on the radio most days and asked us questions about the island.

Many people might wonder why I subjected myself to a cold, damp, windy, foggy environment for a summer. The truth is that it was the most amazing experience of my life. Having held birds that weigh 100 grams that flew 20,000 miles to get there was thrilling; having stuck your hand into a hole in the rocks without knowing what's on the other end was a rush in itself; and being bitten by a few endangered species will be a cool story I can tell my grandkids someday. The other technicians on the island were amazing people, the staff of Petit Manan National Wildlife Refuge kept us comfortable, and the many people who visited for research throughout the summer helped make the island feel like home.





3 A.M. TO 6 P.M.

BY BENJAMIN MARTINELLI
FORESTRY

This past summer I worked for J.L. Brochu, a logging contractor out of Eustis, Maine. The work location ranged anywhere from Kingfield to Coburn Gore and over towards Rangeley on Route 16. The logging took place on land owned by International Paper, Plum Creek, Wagner, and the Penobscot Indian Nation. Mainly, I operated a grapple skidder along with a friend and peer at UMaine Mike Tippet. When the weather was bad and there was a lot of mud to hold up harvest production, we were put on other jobs such as road construction, screening gravel, or working in the field with the mechanics.

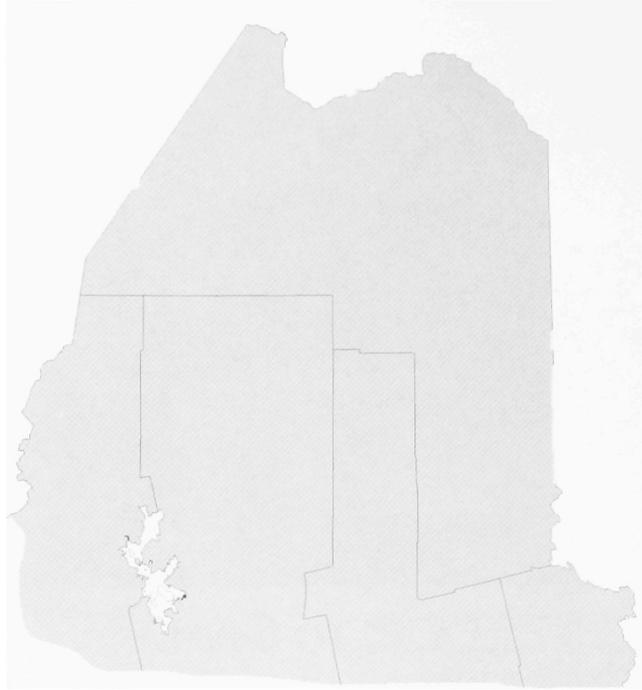
A typical day usually started around three a.m. when Mike and I would leave the house and meet the crew at the garage. The crew we normally worked with consisted of three grapples, a limber, and a slasher. We were in our machines and moving by four a.m.. At noon we would take a half an hour break for lunch, though lunch usually consisted of greasing and light maintenance instead of eating food.

Maintenance is a big deal at J.L. Brochu as it is with most loggers. We greased our machines once a day and checked problem areas on the machines constantly throughout the day. At four p.m. we would fuel up and head back to the garage. Before we left for home, we would fuel our off road tanks, get parts, fluids, and make hoses for the following day. After all was said and done we would get home between five and six p.m.



This job was a lot of fun; every day on the job, I was learning new things about machinery, BMP's, and the business of logging. What I found most enlightening was the importance of careful planning. During a few "jobs", the foresters wanted around 50 loads of wood a week. To do this we had up to four grapples with two limbers and two slashers working on two to three landings. With that much equipment it takes a lot of communication among the crew, and thinking ahead to catch problems before they occur.

I enjoy logging, although sometimes it can involve lots of headaches, but as long as you can take the good with the bad it's a good experience.



DATA COLLECTION IN THE NORTH MAINE WOODS

BY ADAM NICAK

FORESTRY

The past two summers I have been working out of Fort Kent for Irving Woodlands. This experience has given me quite a bit of knowledge and in a few ways it has changed my outlook on the experiences I have had since I first headed northward. The first thing that made me realize I would have to change my mindset was simply the drive up. I am from southern Maine and honestly I had never been much further north than Bangor. Just that first drive up taught me that Maine is a much bigger state than I had originally thought. It took the drive from Gray to Fort Kent for me to realize that I should have believed my elementary school teachers when they told me that you could fit all of the land area in New England inside the state of Maine. I also realized that seeing moose and bear is commonplace there, whereas, I had only had the occasional experience. After the completion of my first summer at Irving on the tree planting crew, I thought I was ready for anything Irving could throw at me. Wrong.

The first job of this summer was to pre-assess a portion of the land, which would be precommercially thinned. Pre-assessment consists of sampling plots to find how dense the area is so that the forester would know what pay scale to pay the migrant workers on. This job proved to be an experience all unto its own. I had to push my way through regeneration that was so densely

packed that I could hardly see a few feet in front of me. Within a week of doing this, I learned how important it is to keep a large supply of pencils at all times or to tie a piece of flagging around the pencil you are using. I had just made it to the back line of a 10 hectare block when I tripped, fell and sent the two pencils I had flying. Now, the pencils I had were not your typical yellow pencils, but had the wood grain showing. These pencils looked about as close to sticks as pencils could. As you can imagine there was no way I was going to find these pencils. As it was I could hardly see the ground and they looked just like it. I then had to walk out to the truck to get a couple more just so I could do a new series of plots.

This summer, I also performed three year surveys to check the stocking and density of plantations. This was relatively simple and didn't create any problems until the end of the summer when I had to paw through raspberries to try and find trees. I learned a lot about stocking and density this summer, which made Silviculture go a bit easier for me this past fall. After a couple weeks, I got to the brunt of my work which was Continual Forest Inventory (CFI). I found CFI to be really fun, I basically had to find pre-established plots in the forest and measure how much the trees had grown. The CFI plots were set up in such a way that there were six variable radius plots

centered around another plot. This created what looks like seven points arranged in a hexagon. Typically, I would start at the road where there was a starting point, usually a blazed tree, and then follow a distance, bearing and hopefully a paint trail to the centerpoint. I would then work around these plots, making diameter and tree height measurements, then repainting the area. This kind of



work created an entirely different kind of problem than I was used to. The most notable problem is that the forest can change quite a bit in the five years since it was last measured. Often the paint trail to the plot would be lost, due to previous harvests. During times like these, I felt like a detective because all I had to work with were some



pins, paint marks on stumps and a list of trees that used to be present. I then had to find all the points to make sure none of them fell into the woods. The second type of problem I ran into was quite a bit less common, but created much more of a headache. In some cases the last person who measured the plot would make a rather simple mistake that would take hours to figure out how to fix. The most common one was listing a backsight instead of a foresight. This would cause me to pace in the wrong direction, waste time and it always seemed that I was

forced to climb a really steep hill, walk through a swamp or travel through another miserable area. Typically, hours and some updated aerial photos later, I would find the person's mistake and locate the plot.



The most important thing I learned is that at school you are given the know-how to do the work that your employer asks for, but it is the summer work experience that teaches you how to perform your job when a wrench is thrown into the works.



FOREST RESEARCH ON THE “SHIFTING MOSAICS PROJECT”

BY BRIAN MILAKOVSKY
FORESTRY

Knowing that I would probably not be able to get a job with a landowning company my first summer of school, I decided last year to find a job that would at least keep me in the woods. I first heard of my employer, Manomet Conservation Services, and the project I worked on when my future boss Andy Whitman came and spoke at school. He gave a presentation on “The Shifting Mosaics Project,” a multi-year study of Maine’s forest lands, performed to determine how much forest land is in a late-successional state. Late successional stands have reached the species composition and structure that suggests they are mature, and will not change again significantly without a big disturbance. If such a stand is not old-growth, it’s well on its way. There are very many species of lichen, moss and epiphytic that depend on such stands for habitat, and they have high value to some mammals and birds. Many landowning companies are harvesting these stands at a rate that will eliminate most of them in a few decades. At the same time, landowning companies are going through certification processes that require them to identify and protect late successional forests. Manomet is helping the companies identify the stands, record their value and, potentially, set them aside from stand conversion.

My job was to run 200-meter transects (it’s science- everything metric!) through stands and check the transect for late-successional features. The most obvious of these was big trees (big=old=late successional). But we also looked for downed woody material and indicator lichens. We worked on the land of many companies such as Irving, Seven Islands and Huber around Ashland, Plum Creek around Stratton, and Baskahegan around Danforth. We also spent several weeks on public timberlands in the amazing Bigelow Reserve. After running dozens of transects all over that range, I knew it better than your most dedicated AT hiker! That was

a big highlight, hiking through huge sugar maple-yellow birch forests, and camping out for three days at the Horns (elevation 4,000 ft) to do transects in alpine spruce-fir.

I enjoyed the Bigelow Reserve, but working on industrial lands was more interesting. I came in with a lot of preconceptions- some got tossed and some were proven. I certainly saw more old, mature forests than I thought I would. But I was also amazed at how much of it had been cut. We worked in one mountain range that my boss said had been almost completely late-successional forest when it was purchased 25 years ago. When we got to it, the old forest was in tiny pieces and thousands of acres were regenerating clearcuts. The old stuff was getting cut so fast it was hard to see what the company would have left to cut in ten years- because those clearcuts weren’t growing that fast. I saw some very nice shelterwoods, but I also saw stands of veneer birch that had been site-converted to fir! I learned that many of the companies were trying to bring back softwoods in big numbers to mountain forests because of the price they were getting. It was really interesting to watch stands getting cherry-picked for spruce in June because it was valuable, and then when hardwood pulp prices jumped up in July the same stands were re-entered for maple and birch pulp. It was a great chance to see the industry in action.

My job with Manomet really introduced me to big-scale forestry, even though I was kind of an outsider looking in. Most of the foresters and loggers we met on

the job were nice to us, but sometimes there was a little tension when they found out what we were looking for. Therefore, a big part of our job was public relations! I got a good appreciation for how rare and valuable old forests are in Maine, and how different companies are managing them. This summer I hope to use what I learned with a good “inside” job, maybe on the same lands I cruised for Manomet.



WORKING IN THE WEST: A WORTHWHILE VENTURE

BY MOLLY SIMONSON
WILDLIFE ECOLOGY & FORESTRY

Looking for jobs is sometimes a painstakingly tedious task; search online, thumb through pages of info, and check out the bulletin boards. I found my job for last summer on the bulletin board in Nutting. It was a bright flyer touting the benefits of working for the U.S. Forest Service in northern California. Yes folks, it was a government job, trust me I've heard all about it by now. I worked on the Lassen National Forest, containing 1.2 million acres, in the Eagle Lake Ranger District in Susanville, CA. It is in a unique area where the Sierra Nevada Mountains, Cascade Mountains, Modoc Plateau, and desert-like Great Basin merge together. This was mountain country full of great streams and lakes, with nearby Lassen Peak rising 10,453 feet. There were four timber crews, each comprised of six members that came from around the country.

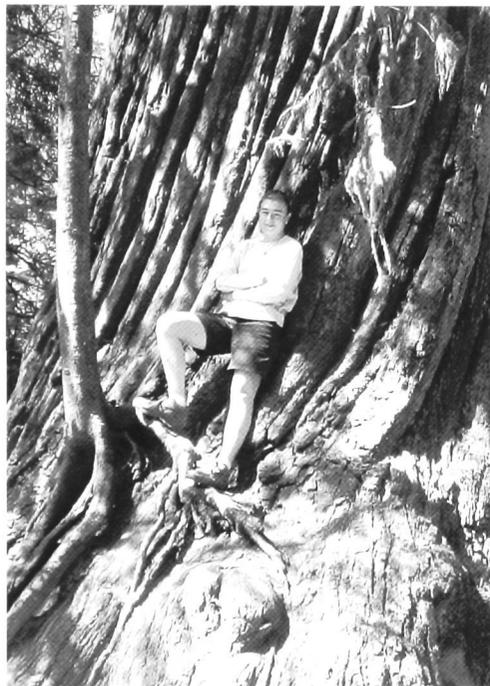
California's logging past has created a dangerous situation by converting open old-growth forests into dense fire-prone stands. The major tree species are ponderosa pine, Jeffery pine, lodgepole pine, and the occasional stands of incense cedar, sugar pine, red fir, and white fir. Our job was to create fire protection zones by thinning the stands a great deal in order to open them back up to a more original state. The entire area we worked on was made up of several units that were 5,649 acres in total size. The work included painting boundaries, creating wildlife units, marking trees to remain, stand exams, precruising, and cruising. In nearby areas, harvesting operations allowed us to see what the results of our work would look like. My supervisor did a great job of explaining to us what was going on with everything, and to make sure we had a chance to do all the various work.

It was ensured that every opportunity was open to the forestry students, so there were other activities we

were involved in. Most importantly, I was able to go through training to become a Region 5 Certified Timber Cruiser. I switched over to do work with an ecology crew doing stream and soil monitoring for a few days. I also got experience with GPS, worked with Recreation in campgrounds, 3P cruised in protected aspen regen stands, took a trip to a local mill, visited several working fire towers, worked in other districts with new people, and took the occasional breaks at local streams, lakes, and to check out the largest trees on the district. Though not work related, another great thing I got to do was volunteer with my supervisor for the U.S. Fish and Wildlife Service on some evenings. We searched for dead and dying waterfowl for testing on a local lake plagued with avian botulism.

Certainly not all of my experience out west was through the job. The area I was in was amazing. Nearly every night after work was filled with hiking the many mountains or fishing for the plentiful rainbow trout. Weekends were spent traveling to see the sights, which included the coast, Redwoods NP, San Francisco,

Lake Tahoe, Reno, Crater Lake NP, and Lassen Volcanic NP. All this, however, was not the best part of my experience. That belongs to the drive across the country and back. There is so much to see and do that cannot even be imagined. Along the drive, I visited six more National Parks, drove through several incredible national forests, saw a massive amount of great wildlife, and got a taste of the different cultures of the country. Government work certainly is not for everyone, but for those thinking about it, I recommend it. If nothing else, I hope everyone gets the chance to do a cross-country trip at least once in their life. It is the best thing I have ever done and can't wait to do it again.



THE MAINE FUTURE FOREST ECONOMY PROJECT:

CURRENT CONDITIONS AND FACTORS INFLUENCING THE FUTURE OF MAINE'S FOREST PRODUCTS ECONOMY



BY

DONALD J. MANSIUS

DIRECTOR OF POLICY AND MANAGEMENT, MAINE FOREST SERVICE

&

HENRY L. WHITTEMORE

DIRECTOR GOVERNOR'S FOREST CERTIFICATION INITIATIVE, DEPARTMENT OF CONSERVATION

Maine's forest economy - a major portion of the state's overall economy and a foundation of our rural areas, is at a turning point. Globalization has brought opportunity and challenge: opportunity in the form of expanded markets for many of our products, and challenge in the form of competitive pressures exerted by lower-cost sources of timber, labor, and business regulation. There have been substantial expansions and upgrades at some facilities. However, recent mill closures at less efficient mills, capacity reductions and temporary shutdowns of wood processing facilities in Maine and the region are indicators of the changing environment. While employment levels have been declining as mills become more efficient, thus reducing employment, it comes as a surprise to many that production levels in some sectors of the forest products industry have increased significantly, thus making Maine's mills more competitive. To thrive in this new economy, Maine's

forest products industry must maintain and expand markets and invest in the latest technology to stay efficient and competitive.

Maine's Forest Products Sector includes all of the activities involved in the growing, harvesting, and processing of the physical products of the forest, including lumber, paper, Christmas trees, maple syrup, and many other products. As of 2000, the year for which most recent data are available, the sector directly supported 31,600 jobs (4.2% of the state's total), 11 percent of the value of all of Maine's economic activity, and 21 percent of the value of exports from the state. For the past 40 years, the Forestry Sector has contributed 25-31 percent of total manufacturing employment, 29-38 percent of all manufacturing wages, 35-44 percent of the value of products produced, and 54-81 percent of new plant and equipment capital expenditures. In 2000, the sector produced goods and services valued directly at more than

\$6 billion, with a total economic impact of nearly \$10 billion and a total employment impact of 76,000. Although estimates of the fraction of Maine-based tourism based on forest lands are difficult, a significant portion of the \$9.5 billion in annual sales that the Maine Office of Tourism recently attributed to out-of-state visitors is likely forest-related (David Field, 2004, personal communication).

The Maine Future Forest Economy Project is a Department of Conservation initiative¹ to: “[Identify] what is needed to maintain Maine’s existing wood using industries, to identify growth opportunities in existing and potential new wood using industries, and to identify what Maine State Government and the industry itself could do to improve the prospects for Maine’s forest products industries.” The project is part of Maine state government’s ongoing effort to better understand and support the state’s forest products industry. The project focuses on the manufacturing firms that comprise part of Maine’s forest products industry.

Maine’s Forest Industry Cluster

Industries of all types are most successful when they are part of a mutually supportive “cluster” made up of a number of companies with similar or different market niches and the service industries that support them all. Maine has a strong forest products cluster, with very strong relationships among segments of this diverse industry. “Clusters” are a location-based group of interconnected and interdependent industries that compete with one another *and* strengthen one another through their interactions. Cluster members include the



key manufacturers, suppliers, academic and government institutions that support the industry, trade associations and firms that provide services to the industry.

In Maine, the forest products cluster includes pulp and paper companies, sawmills, secondary wood product manufacturers, biomass energy firms, forest landowners and managers, loggers, equipment manufacturers and distributors, biomass power facilities, university programs, financial institutions, government agencies, trade associations, forest-based recreation

businesses, conservation organizations, and transportation firms. The diversity and depth of Maine’s forest products cluster is its key strength. The existing forest products industry provides markets for all types of wood, from veneers and sawlogs to pulpwood and biomass. This diversity allows landowners and loggers markets for all of the products they grow and harvest, and allows land managers to practice sustainable forestry as even the poorest quality material can be harvested and sold rather than being left to occupy the land, thus preventing valuable trees from growing. Additionally, what is waste material for one manufacturing process often serves as raw material for another sector of the forest product manufacturing industry.



Summary

Maine’s forest products manufacturing industry is taking tangible steps to address the increasing challenges it faces from around the globe. The industry enjoys clear public support, and the state could take several actions to support the industry. To maintain the forest products industry as the strong and diverse cluster we see today, Maine needs to encourage new investments in the latest technologies and encourage innovation. At the same time, Maine should address challenges to its business climate and encourage diversification of forest products, particularly in those areas such as engineered wood products or bioproducts, where intellectual property protections may provide a significant competitive advantage.

(Footnotes)

¹ Funding for this project provided by the USDA Forest Service with additional funding from the Maine Technology Institute.

ARTIFICIAL REGENERATION OF BROWN ASH

BY ALAN J. KIMBALL
ASSOCIATE PROFESSOR OF FOREST RESOURCE

Brown ash is of economic and cultural importance to Maine's Native American community for making utilitarian and decorative baskets. Brown ash baskets represent a value added product that brings significant income to the households where they are made.



Micmac basketmaker and MIBA member, Eldon Hanning.

Maine's brown ash stands, like those in New York and the Lake States, are in decline. When brown ash trees grow too slowly, they yield brittle splints that are much less desirable for basket making. Basket bolts must have several successive years of nickel-width growth rings so that they will separate into useful splints when pounded. Planting brown ash on upland sites might be one way to address the growing shortfall in the supply of basket quality bolts.

Over the last four years the Penobscot Nation, the Maine Indian Basketmaker's Alliance (MIBA), and the Maine Agriculture and Forest Experiment Station have been cooperating in a pilot study of the artificial regeneration of brown ash.

This study has three distinct components:

1. Seed: We have collected and planted seed from two lots in Old Town and one in Limestone. These seeds were sown in pots filled with potting soil and covered to a depth of 3/4" All pots were kept outdoors, watered only during extended dry spells and heavily mulched with wood shavings each winter. The seeds that we collected and planted early in the fall of 2002 germinated after two winters. The seed that we collected and planted later in the fall did not germinate at all - we are hopeful that the third winter will be the key for those seeds.



2. Vegetative reproduction: During early spring in 2003, we gathered dormant brown ash stump sprouts in Old Town and Limestone. We dipped half of them in rooting hormone, laid them horizontally in trays of potting soil, and covered them to a depth of 1" following a procedure reported to have worked with green ash. Although all of the buds broke dormancy and sprouted new leaves, none of the cuttings rooted.

3. Artificial regeneration: In 2000, we planted 150 bare root brown ash seedlings on both a moderately well-drained hayfield site and a poorly drained, cutover woodland site. Both sites test three different approaches to controlling animal depredation: tubular plastic tree shelters, a soil applied bitter repellent tablet, or a bitter repellent applied as a spray in a latex carrier.



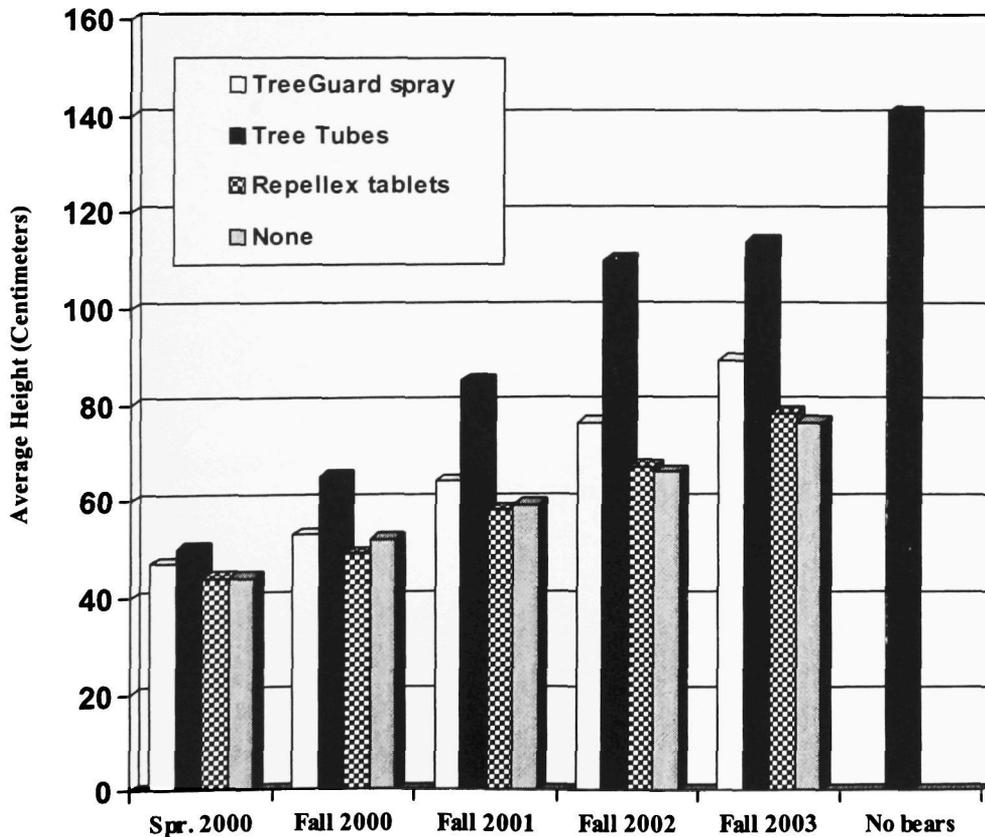
The graph below shows that the tubular tree shelters have had a strong positive influence on the height growth of the brown ash. The shelters also make it much easier to find and avoid cutting the seedlings when we do our annual machete weedings of the shoulder high competition that comes up repeatedly on the wet, cutover site. The only negative effect to date has been the tendency for black bears to use the tubular shelters as chew toys. At this point, fully 30% of our tubes have tooth marks and one seedling died when it was broken in a crushed tube.

While we anticipate continuing problems with competition, browsing, and playful wildlife, it appears that once we have a supply of vigorous seedlings, initial establishment will not require any extraordinary procedures.



Dr. Katherine Carter with bear chew toys.

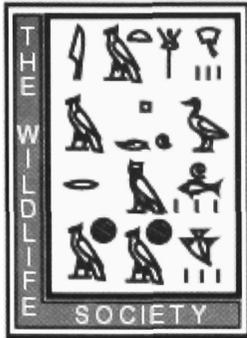
Average Height of Planted Brown Ash by Treatment





Student Activities





The Wildlife Society

The University of Maine Student Chapter of The Wildlife Society, is a subchapter of the Maine Chapter of The Wildlife Society, working to “enhance the ability of wildlife professionals to conserve diversity, sustain productivity, and ensure responsible use of wildlife resources for the benefit of society.” In the last year, we have been very busy working on projects and activities. We have brought a variety of speakers to campus to talk about wildlife related topics including ship-strike in whales, the American Woodcock, and trapping in Maine. We have also had a variety of presentations from graduate students, including topics on Least Terns and the San Clemente Island Sparrow.

We have continued to have biannual Leonard’s Mills potluck socials, participation in the Annual Sportsman’s Show, the annual Game Banquet at the Penobscot County Conservation Association, mistnetting woodcock, and we continue to perform our three routes on the annual Maine Audubon Owl Survey.

Other current projects include working on the Witter Farm Wetland Restoration Project, a joint project

with the Society for Conservation Biology. We have been writing protocols and performing surveys for a variety of wildlife located in the wetland and surrounding areas. This has given students experience in many of the aspects surrounding wildlife surveys. We will continue with this project in the future in order to inform the public on the value of the species that use this resource. We have also been working on a mentoring program, designed to give Wildlife Ecology students the opportunity to closely interact with various professionals in the wildlife field to discuss their field of study, graduate school, academics, job opportunities, and other topics of interest. This will help students in addition to the job/resume building workshop we put on each spring.

To say the least, members of the Student Chapter of TWS have been busy in the past year and we continue to provide students with information about local, national, and international natural resource issues, career opportunities, wildlife techniques, and a place where students can make friends that will provide them with connections throughout their careers.



Xi Sigma Pi



Xi Sigma Pi is a National Forestry Honor Society that recognizes individuals who have excelled in their prospective fields through dedication, commitment and hard work. Although Xi Sigma Pi was originally an honor society for forestry students, it has gradually expanded to encompass Wildlife Ecology and other majors in Forest Resources. As a service organization we are most notably involved in the annual Christmas tree fundraiser for student scholarships. We also encourage contact with local forestry and natural resource professionals.





Student Chapter



Over the past year, the University Of Maine Society Of American Foresters Student Chapter has increased its number of members, and continued to provide opportunities for students to enhance their academic experiences and professional development. We hold meetings twice a month, noontime lectures every month, one or two field tours a semester, and are involved in many volunteer activities.

The “SAF Noontime Lectures” involve speakers from various professions in forestry and related fields. Lecture topics over the past year included resume building and professional development, forestry and wildlife management, small scale forestry consulting, bio-energy, and sudden oak death.

In October we took a trip to see long-term hardwood silvicultural research at the Bartlet Experimental Forest, which is part of the White Mountain National Forest System in New Hampshire. The tour was an

outstanding experience and exposed us to new perspectives on forest management in the northern hardwoods. In October, we also helped Dr. Dave Field, and the Appalachian Trail Club, dismantle an old cabin in Central Maine. This spring, we have two trips planned: a forest policy trip and a hardwood utilization trip. The forest policy trip involves viewing the Maine Legislature in action, and the hardwood utilization trip consists of a tour of Huber Resource’s optimized concentration yard in Dolby, Maine.

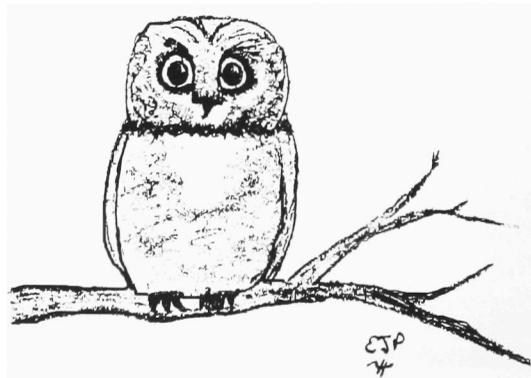
In September we initiated a peer guidance program, which involves both a social and an educational component. This program was created to help ease the stress and confusion for freshman and sophomores in the forest resource programs. A professional member mentor program is currently in design, and we hope to have it implemented by the fall of 2005. The goal of this program is to enhance communication between forest

Student Chapter



The Student Black Bear Chapter of NAI (National Association for Interpretation) is an organization that brings students together who are interested in the park, recreation and tourism (PRT) profession in a social and academic atmosphere.

NAI and PRT are both designed to aid individuals in their personal and professional development by inviting guest speakers to talk about issues related to our profession and participating in community service projects. NAI holds monthly meetings where current issues are discussed and future project ideas are generated.



Society for Conservation Biology



The University of Maine SCB was formed to bring together students, professionals, and citizens interested in conservation biology. We hope to educate the public, build partnerships between professionals and students, and to develop local interest and involvement in conservation of our natural resources. The focus of the University of Maine SCB is conservation at a local level through practical projects, involving a diversity of people.

During the spring of 2004, we helped to combat the spread of purple loosestrife, *Lythrum salicaria*, a known invasive in the Penobscot River watershed. A small group of students removed the purple loosestrife from an area where it was invading cardinal flower habitat at Leonard's Mill in Bradley. In the future we plan to help monitor the area at Leonard's Mill as well as wetlands on campus for the presence of purple loosestrife and remove it where possible.

In a related project, we are working to raise public awareness of the exotic invasive plants found on campus. This is a new project for the 2004-2005 academic year. The University of Maine campus has many planted and volunteer invasives including bush honeysuckle, Japanese barberry, burning bush, purple loosestrife, and Norway Maple. Our goals for this project are to identify and map the invasives, get people interested, and work to replace them with noninvasive or native alternatives.

Keeping to the goals of public education and local conservation, the University of Maine SCB has joined forces with the University of Maine chapter of The Wildlife Society to develop an inventory of species using the wetlands bordering the Witter Farm. Soil profiles

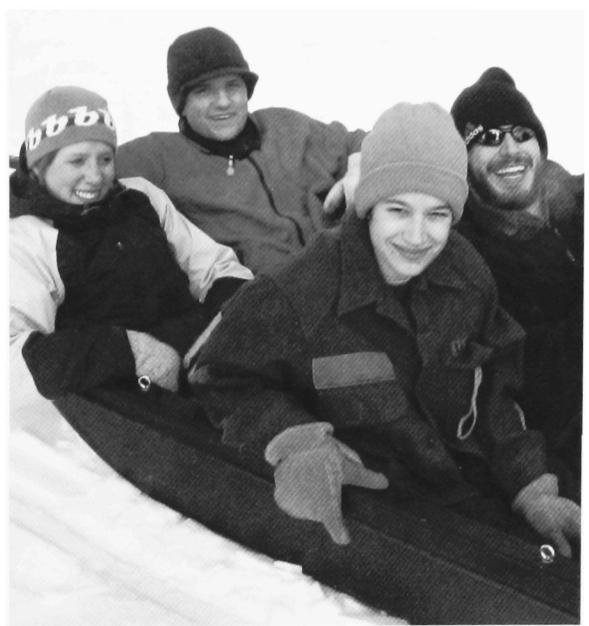
and aerial photographs show that the wetland has decreased in area from its historical size due to activity at the farm. The wetland provides habitat for many species and its loss will affect the species richness of the area. Last winter and spring we began monitoring vertebrate species by winter tracking and morning bird surveys. Twenty-three bird species were observed in these surveys. In addition, we witnessed an amphibian migration into the wetland that included several species. The long term goal for this project includes creating a sustainable management plan for the wetland that borders the farm pasture. This joint effort will hopefully showcase how agriculture and wetlands can co-exist.

In addition to the above projects, the UMaine SCB has published a newsletter outlining our projects and local conservation issues. There has also been a conservation discussion group started by David Patrick, a PhD candidate in the Wildlife Ecology Department. This group began meeting last semester and meets biweekly to discuss global and local issues related to conservation. To keep abreast of global conservation and issues in the international society, a group of members attended the 19th annual International Society for Conservation Biology Conference at Columbia University in New York. There they attended talks and workshops and Vice President Audie Arbo introduced our chapter at a meeting for local chapter representatives.

Our group is very young, having just been resurrected in the fall of 2003, and has been focusing on recruitment. We hope to continue these projects into the future and to further forge connections between conservation professionals, the university, and the public.

resource professionals and forest resource students. In an attempt to raise money for our chapter, we are also working on creating a calendar for 2006. The theme of the calendar is "Scenic Views of Maine's Forest."

In October, our chapter participated in the annual Maine SAF Poster Contest. The poster contest involves going to elementary schools and discussing what forests and forestry means to them. The elementary students then have an opportunity to make a poster based on their perception of forests. In October, our chapter and Consulting Forester, Carol Redelshiemer, organized a trail work and forestry education day for the Orono Boy Scout Troop. The event took place in the Veazie Town Forest, and covered many topics ranging from tree growth and shade tolerance to silvicultural systems and forest products. This spring, we are also planning a Project Learning Tree Workshop for our members. Our chapter finds volunteer work, especially working with children, very rewarding. The children of today are our future, and we try to take every opportunity we can to educate them about forest ecology and management.





Woodsmen Team

The University of Maine woodsmen team continues to be very active in and around the University community. The spring of 2004 held host to our annual home meet next to Nutting hall. This competition was arguably one of the best ever; drawing teams from as far off as the University of New Brunswick, and Syracuse's School of Environmental Sciences and Forestry (ESF).

For this meet, the University of Maine fielded 2 men's teams, one women's team, and one Jack and Jill (mixed) team, making a total of 24 home competitors. There were a total of 13 teams that competed. Out of this very tough field, the senior team from Maine took first place, just edging out ESF, while the younger men took eighth and the women finished third in their division.

This Home meet proved to be a fine warm up for the annual Spring Meet, which really serves as the definitive championship competition. The meet was held at Dartmouth, just as was the first annual Spring Meet. Competition was again fierce, as the top three teams in the men's division were separated by a mere three points, out of a winning total of over 1400. The senior team from Maine garnered second place, losing by a mere 1.5 points. Though slightly disappointing, this finish did win the team two shiny new chopping axes that we put to good use the following season.

Since Spring Meet the team has lost 4 of its senior members to graduation. Of these, Anna Nelson, the sole female graduate, left us in the spring of 2004, as did Matthew Galambos. Even without these two, the team fared quite well in the fall season. The men nearly swept the Unity meet, winning all but one singles event, while the women placed third. UNH hosted their home meet again this year, with similar results for the Maine teams. Following this, the fall season was capped off with a trip to the University of New Brunswick. The men finished fourth overall, against the highly trained Canadian teams.

The spring semester started off rough, with loss of two more of the senior men, and the following ninth place at Nova Scotia. Even with this finish, there were many promising performances in events ranging from fire build to pole climb to single buck. Currently the team is preparing for its home meet again, and looking forward to a productive end of the season.

We will again be hosting the Maine High School Woodsman Championship. This was a very fun and rewarding experience for those on the team that helped out last spring, as it gave us a chance to meet and socialize with some of the younger members of our sports.



The Maine Forester Staff



Hugh Violette, Ben Nottermann, Maggie Burke, Rory Eckardt, Louis Morin
Katie Manende, Chandler Buie, Gretchen Heldman, Spencer Perry, Molly Simonson



Co-Editors
Maggie Burke
Hugh Violette

Layout Staff
Chandler Buie
Rory Eckardt
Nathan Kay
Katie Manende
Spencer Perry
Ben Nottermann

Artists
Brian Curry
Matt Kasson

Staff
Thomas Coleman
Gretchen Heldman
Molly Simonson
Deryth Taggart

Advisor
Louis Morin



*Looking ahead...
to the next 100 years of
forestry education at the
University of Maine.*



"Cub Scouts," by Forest Hart--the centerpiece of the renovated courtyard

Help us revitalize the Nutting Hall Courtyard.



JOIN A GIVING SOCIETY

- Black Bear**
\$50,000 over
- White Pine**
\$25,000-\$49,999
- Spruce**
\$10,000-24,999
- Pinecone**
\$5,000-\$9,999
- Bear Cub**
\$1,000-\$4,999



The UM Bear was created in 2003 by sculptor Forest Hart to commemorate the 100th anniversary of the University of Maine Forestry program. The miniature bronze bear is resting on a base that was made from the black cherry trees planted in the Nutting Hall courtyard when Nutting Hall was built in the late 1960s. The cost of the bear is \$600 with forty percent of the sale of the sculpture going towards the purchase of the nine-foot "Cub Scouts" bronze. For more information about this project contact:

*Judith Round
5782 Winslow Hall
College of Natural Sciences, Forestry, and Agriculture
The University of Maine
Orono, ME 04469-5782
207 581 3229
judy.round@umit.maine.edu*



E. D. BESSEY & SON

Products from the Northern Forest

HINCKLEY, MAINE 04944

(207) 453-9388

*Sustainable Forestry Creates
A Legacy For Future Generations*



MAINE FOREST
PRODUCTS COUNCIL



SMALL WOODLAND
OWNERS OF MAINE



columbia FOREST PRODUCTS

MANUFACTURERS
OF ROTARY-CUT
VENEER

WE BUY
YELLOW BIRCH
WHITE BIRCH
HARD MAPLE
AND RED OAK
LOGS



LOG BUYERS:

George Pelletier.....Fort Fairfield, ME
phone 473 7402.....Mobile 768 0067
Stephen Tudor.....Dover-Fiscroft, ME
phone 554 2395.....Fax 564 2054
Norman Beane.....Bethel, ME
phone 536 3881.....Fax 836 2167

Tyler Smith.....Nova Scotia
home 902 843 2068.....Fax 902 843 2068
Dean Mercure.....New Brunswick
phone 508 263 5735
fax 506 263 8317

395 MISSILE STREET • P.O. BOX 848 • PRESQUE ISLE, MAINE 04769
Phone: 207-764-4428 • Fax: 207-764-6417



The Maine Place for Business



Toll-Free 1-877-Bangor1

bangor com

Member FDIC Equal Housing Lender



H.E. Sargent, Inc.

A History of Promises Kept...

Construction Management ~ Industrial
Fast Track ~ Design/Build ~ Airports



Sitework ~ Concrete Structures ~ Demolition
Environmental Construction ~ Highway/Bridges

378 Bennoch Road, Stillwater, Maine 04489
Tel: 207-827-4435 Fax: 207-827-6150
www.hesargent.com

People in Maine's forest products industry
choose *Farm Credit* for loans because we...

- ... Thoroughly **understand** Maine's forest products industry.
- ... Demonstrate a **commitment** to financing the industry through our active involvement in industry organizations.
- ... Maintain a **personal touch** where your local loan officer is your primary contact. And when you call the office, a loan assistant knows you by name and will provide you with up-to-date information any time you call.
- ... Offer **flexible lines of credit and equipment leases** that meet your needs.

Call us and we'll be happy to stop by your place of business to discuss your business needs face-to-face, people talking with people.



Farm Credit
OF MAINE

800-831-4230

Lending to Maine Farming, Fishing and Forest Products Industries

FRASER PAPERS...

MORE THAN A
FOREST INDUSTRY...

FRASER PAPERS...

CERTIFIED MILLS AND FOREST

OPERATIONS.

SAFETY AND ENVIRONMENT ARE

OUR TOP PRIORITIES.

Community:

Maine & New Brunswick

Financial support:

Educational, cultural, economic, health,
environmental and sports activities

Certification:

All forest operations are certified
ISO 14001 & SFT

Projects: (examples)

Water Quality Monitoring -

Streams on managed land in Maine & New
Brunswick

Results: exceeds Water Quality Standards

Wildlife Management -

Entered landmark habitat management agreement
with Maine Department of Inland Fisheries and
Wildlife for management of deer and other
species - 1996 to present

Joint Projects:

U.M.O. & C.F.R.U.



Attention: Woodland Owners

Robbins Lumber, Inc. Forestry Landowner Assistance

Program offers the following services:

1. Forest Management and Tree Growth Plans
2. Timber estimates and valuation
3. Harvest layout and supervision
4. GIS mapping service
5. State Forestry regulation and local ordinance interpretation

We have been responsibly managing land for over 100 years.

We are offering our forestry program to other landowners.

Robbins Lumber is Sustainable Forestry Certified (SFI).

For additional information contact:

Mark Vannah, Licensed Forester #1098

Robbins Lumber, Inc. PO Box 9 Searsmont, ME 04973

Tel: (207) 342-5221 Fax: (207) 342-5201

WWW.RLCO.COM

John T. Cyr & Sons, Inc.



Cyr Bus Line

Motorcoach & School Bus Charters for school and
athletic groups, senior citizens or private outings



Cyr Northstar Tours

Deluxe escorted motorcoach tours and day trips to
Destinations throughout the U.S. and Canada

Call for our free 2003 Vacation Planner

153 Gilman Falls Ave.
Old Town, ME 04468

440 Washington St. North
Auburn, ME 04210

1-800-244-2335

207-827-2010

Fax 207-827-6763

www.cyrbustours.com

A HEALTHY FOREST PROVIDES MANY BENEFITS

JOBS - CLEAN AIR - RECREATION - CLEAN WATER - SOLITUDE - STRONG ECONOMY



MANAGING FORESTS FOR THE FUTURE

SEVEN ISLANDS LAND COMPANY

Ham - Hinckley House 112 Broadway P. O. Box 1168 Bangor, Maine 04402-1168





**Low Fees & Great Loan Rates
Are Just a Few of the Benefits
to Being a Member of
University Credit Union**

- Custom Checking with no fees, no minimum balance, and lots of free extras like home banking and online check imaging
- Exceptional Personalized Service
- Accounts Insured to \$350,000 thru NCUA & FDIC
- Local loan decisions assuring you honest answers and fast responses
- Convenient online loan applications
- No fee statewide SURF ATM access
- Nationwide Shared Branching at CU Service Centers
- Preserving the value of education in Maine



www.ucu.maine.edu

UCU

UNIVERSITY CREDIT UNION
740 May Financial Services Boulevard
Orono • Portland • Bangor



Proudly serving the University Community since 1967:
Alumni, Students, Employees of the University of Maine System, Orono residents, Employed in Orono and immediate family members.

Contact UCU for membership eligibility requirements 800-455-5823

