Mark Doty 4/7/16

Weyerhaeuser

SUSTAINABLE FORESTRY INITIATIVE SFI-00008

April 7, 2016

H.552 An act relating to threatened and endangered species

My name is Mark Doty, I am public affairs manager for Weyerhaeuser, which owns and manages timberland in the Northeast Kingdom. We have foresters and wildlife biologists on staff, our lands are SFI certified and our lands are enrolled in the UVA program. I offer this on H.552, An act relating to threatened and endangered species.

While we support the protection of T&E species and actively engage in activities that promote biodiversity, we have concerns with this bill and with adding critical habitat at the state level, I know that others also have concerns, so I would like to focus on just one of our concerns.

ANR has stated that they want to designate "limited areas of habitat" and they say that broader areas are not a good use of this tool, yet there are no controls included to limit the area involved, that area can stretch to habitat that "was historically occupied by a species". The federal government has a well-established critical habitat program that should be relied upon at the landscape level. Regionally, ranges shift over time, they can shift into and out of Vermont. Species on the edge of their range need special assessment as to whether long-term conservation measures are both a biologically and economically prudent measure.

We support the protection of T&E species and actively engage in activities that promote biodiversity and address federal and state listed or globally imperiled species and natural plant communities through our own efforts and in collaboration with private conservation organizations and state and federal wildlife agencies. I have included the Weyerhaeuser Environmental Stewardship report to demonstrate work that we are doing in Vermont, and our collaborations with Vermont Fish & Wildlife and other organizations.

There is ample indication that woodland owners wish to be engaged with protection of wildlife in Vermont. Much of the forestland in Vermont is in private ownership, much of that in family ownerships. I have included graphs from the Vermont Woodland Owner Survey 2014 that show over 2/3's of the family woodland owners surveyed in Vermont owning more than 10 and 25 acres give the reasons for owning their forested land in Vermont of "Protect nature" and "Protect wildlife".

Add to these that healthy working forests are generally helpful to species and minimize sprawl and fragmentation, and there is a strong case to be made that Vermont will achieve better results through creative and flexible voluntary collaborative efforts engaging woodland owners than with additional rigid regulation.

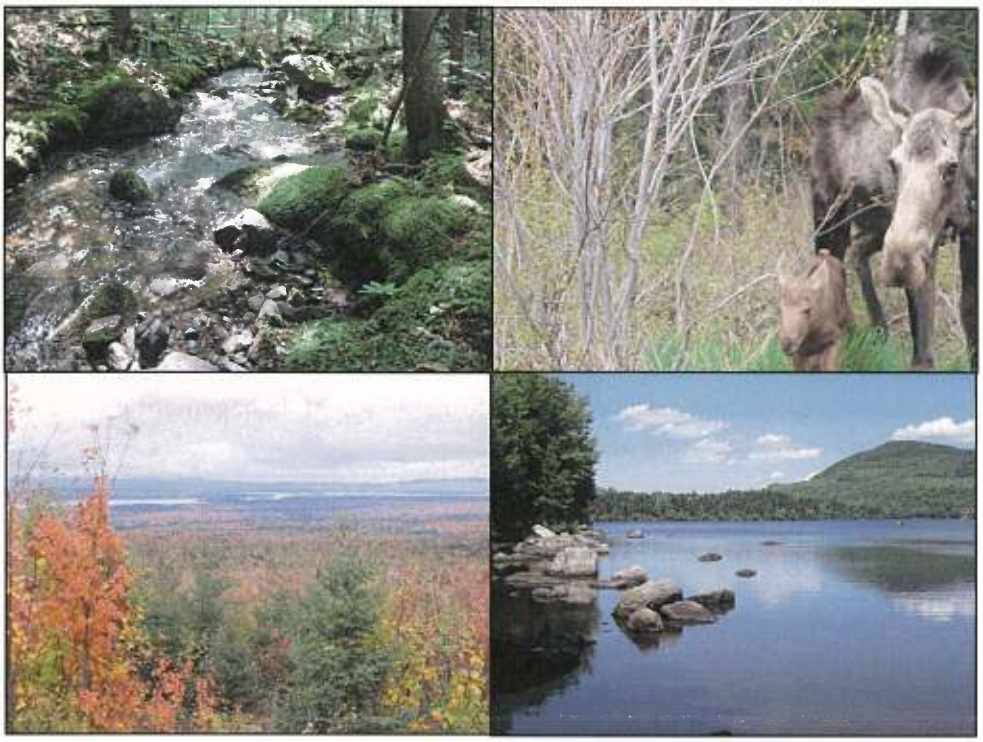
We ask that you carefully weigh this expansion into Critical Habitat in Vermont, and either choose the education and engagement route which we prefer, or that you carefully limit the potential geographic extent of Critical Habitat across the landscape.

Thank You

Weyerhaeuser

Environmental Stewardship

Vermont 2016



Terrestrial

American Woodcock
Spruce Grouse
Bicknell's Thrush
Rusty Blackbird
Deer Wintering Areas
Canada Lynx
Moose
Retention Forestry
Rare Plants & Communities
Invasive Species

Aquatic

Stream Habitat Enhancement
Vernal Pools

Stewardship & Science

Weyerhaeuser's environmental stewardship in Vermont is shaped by its leadership in practicing responsible forest management, the geography of our ownership, and past land management practices. Our forest management plans address biodiversity through adherence to state and federal environmental laws, collaborative projects with a variety of stakeholders, and practices that support the Sustainable Forestry Initiative® (SFI).

Weyerhaeuser promotes biodiversity (*i.e., different forms of life in an area*) by maintaining a diversity of stand structures on its lands through time, while conserving special habitat features such as snags (dead trees), down wood, and legacy trees (large diameter live trees), protecting water resources and riparian areas, and addressing federal and state listed or globally imperiled species and natural plant communities. Along with our own efforts, we collaborate with private conservation organizations and state and federal wildlife agencies.

Interspersed state, federal, private, and non-governmental organization (NGO) lands add diversity due to their different management strategies. The structural characteristics of these different forests are constantly changing due to natural events like vegetation growth, mortality and decay, wind/insect/disease events, and forest management. These changes affect wildlife; enhancing suitable habitat for some species while modifying habitat for others. These tradeoffs occur at the forest stand, watershed and landscape scales. By incorporating special management practices to benefit biodiversity into our forestry, these managed lands provide habitat for a majority of biodiversity in the region.

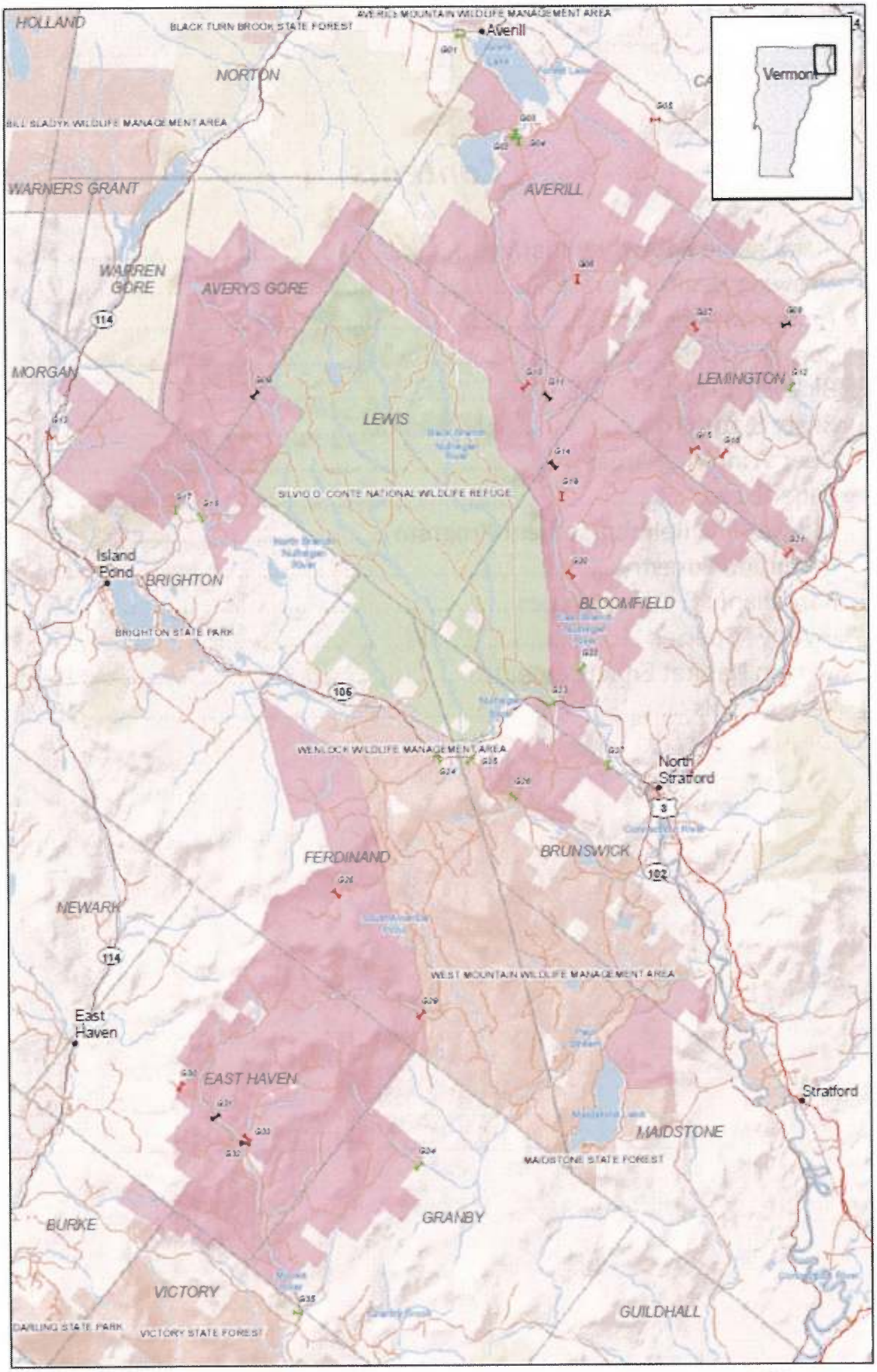
Environmental stewardship projects and programs that inform our forest management plans and promote biodiversity are summarized in the following pages.

For more information about Weyerhaeuser: www.weyerhaeuser.com

For more information about Weyerhaeuser's Vermont environmental projects, contact:

Henning Stabins, Wildlife Biologist, Fairfield, ME
207-453-1045 or henning.stabins@weyerhaeuser.com

Please note that Weyerhaeuser and Plum Creek merged in February 2016 under the Weyerhaeuser name.



Recreation Map

Plum Creek

N

US Highway
State/County Highway
Secondary/Logging Road

Federal
State
Other Public/Private Conserved Lands
Plum Creek Timberlands

Gates
Open
Open Moose Season Only
Closed

0 1 2 4 6 Miles

The information on this map is correct to the best of the preparer's knowledge

8/2010

Contents

Sustainable Forestry Initiative®

Weyerhaeuser ensures the sustainability of its forests by meeting or exceeding the standards of the Sustainable Forestry Initiative (SFI). The SFI is governed by an independent board composed of representatives from the environmental community, academia, and the industry. The SFI was developed in 1994 and has been updated regularly to keep pace with forest science, technology and environmental understanding.

To view the SFI Forest Management Standard, visit: http://www.sfiprogram.org

SUSTAINABLE FORESTRY INITIATIVE
Good for you. Good for our forests.

Key Principles of SFI

Sustainable Forestry
To practice sustainable forestry to meet the needs of the present without compromising the ability of future generations to meet their own needs by practicing a land stewardship ethic that integrates reforestation and the managing, growing, nurturing and harvesting of trees for useful products and ecosystem services such as the conservation of soil, air and water quality, carbon, biological diversity, wildlife and aquatic habitats, recreation, and aesthetics.

Forest Productivity & Health
To provide for regeneration after harvest and maintain the productive capacity of the forest land base, to protect and maintain long-term forest and soil productivity, and to protect forests from undesirable levels of wildfire, pests, diseases, and invasive species.

Protection of Water Resources
To protect water bodies and riparian areas, and to conform with best management practices to protect water quality.

Protection of Biological Diversity
To manage forests in ways that protect and promote biological diversity, including animal and plant species, wildlife habitats, and ecological or natural community types.

Aesthetics & Recreation
To manage the visual impacts of forest operations, and to provide recreational opportunities for the public.

Protection of Special Sites
To manage lands that are ecologically, geologically or culturally important in a manner that takes into account their unique qualities.

Responsible Fiber Sourcing Practices in North America
To use and promote among other forest landowners sustainable forestry practices that are both scientifically credible and economically, environmentally and socially responsible.

Legal Compliance
To comply with applicable federal, provincial, state, and local forestry and related environmental laws, statutes, and regulations.

Research
To support advances in sustainable forest management through forestry research, science and technology.

Training and Education
To improve the practice of sustainable forestry through training and education programs.

Community Involvement & Social Responsibility
To broaden the practice of sustainable forestry on all lands through community involvement, social responsible practices, and through recognition and respect of Indigenous Peoples' rights and traditional forest-related knowledge.

Transparency
To broaden the understanding of forest certification to the SFI Standards by documenting certification audits and making the findings publicly available.

Continual Improvement
To continually improve the practice of forest management, and to monitor, measure and report performance in achieving the commitment to sustainable forestry.

Weyerhaeuser Sustainable Forestry Reviews

- Weyerhaeuser managers and environmental scientists regularly review operations to check over 100 indicators that demonstrate compliance with the SFI Standard.

- Every three years, an independent auditing company randomly inspects operations during week-long reviews to determine SFI compliance. We are proud of the long record of certification going back to 1999! To read the latest Weyerhaeuser & Plum Creek SFI Audit reports, visit: http://www.sfiprogram.org.

Growing Healthy Forests

Weyerhaeuser is committed to sustainable forestry – especially the reforestation of its lands. Growing healthy and productive forests in perpetual cycles is our goal to provide the wood fiber, ecosystem services, and economic opportunities people need and enjoy.

- Weyerhaeuser checks its harvested areas to ensure a proper density of tree seedlings are growing to continue the forest cycle.

- In Vermont, the vast majority of areas are regenerated by nature herself from seeds, root suckers, or stump shoots ready to sprout in the newly created sunlit forest openings. These include a diverse mix of species such as sugar & red maple, white & yellow birch, American beech, balsam fir, white & black spruce, white pine, eastern hemlock, aspen, and cedar.

Fall photo of multiple growing forests diverse in age and tree species with retained legacy trees.

- Weyerhaeuser has foresters, silviculturalists, hydrologists, wildlife biologists, and other experts that develop forest management plans and steward the lands to maintain and improve long-term forest health, productivity, and ecosystem services such as water quality and wildlife habitat.

- The wood from these forests is marketed to many customers in the region, contributing to a 3.4 billion dollar benefit to Vermont's economy from the forest products industry. In Vermont, 21,000 jobs are associated with the forest products sector (VT Dept. Forests, Parks, and Recreation 2012 Economic Report).

American Woodcock Conservation

Objectives

- To implement the North American Woodcock Conservation Habitat Management Guidelines at sites in collaboration with the **Wildlife Management Institute** and others.

Establishment of Demonstration Sites

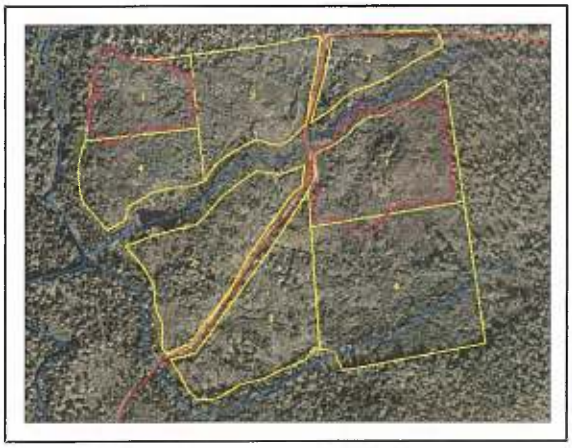
Objectives

- Establish forest management plans that incorporate the North American Woodcock Initiative's woodcock habitat guidelines to maintain and enhance suitable conditions for woodcock, grouse, and a host of other early successional species identified in Vermont's State Wildlife Action Plan as a Species in Greatest Conservation Need;
- Involve local educational institutions and provide science learning opportunities to students;
- Use this plan as a demonstration project and outreach tool to other landowners & the public;
- Enhance a recreation area for the public (hunting, wildlife viewing, etc.)

Status

- Work is ongoing with collaborators to identify potential sites and begin designing management plans.

Examples of past plans and outreach efforts in the region



Students from Unity College assisted with developing a woodcock management plan.

Spruce Grouse Relocation Project

Objective

To assist the **Vermont Fish and Wildlife Department** with enhancing a second population center of the state endangered spruce grouse.

Summary

The Spruce Grouse is a common species throughout the vast boreal forests in Canada and Alaska, but it reaches its southern range limits in New England. Hunting is prohibited by Vermont and Maine state law to maintain current populations. In Vermont, the spruce grouse inhabits the relatively small areas of spruce fir forest found in northeastern Vermont. Here only a small breeding population occurs and it has been listed as a state-endangered species since 1988. To boost the population and increase its distribution in the Northeast Kingdom of Vermont, the Vermont Fish and Wildlife Department began a program in 2008 to translocate spruce grouse into the state. That year, 24 grouse were transferred from Maine and 15 from Quebec. In 2009, 17 additional birds were procured from Quebec. However, in order to improve the probability of a successful restoration effort even more birds were desired.

That is where regional cooperation and public-private partnerships stepped in. Plum Creek, a landowner in both Vermont and Maine, heard about the project in 2010. Plum Creek offered to support a Maine capture team and assist with transporting the birds to Vermont. Peter Emerson, from the Vermont Fish and Wildlife (VFW), trained the Maine capture team, and together with Cedric Alexander and Tony Smith from VFW, led the banding effort and eventual placement of the birds in their new home.

Plum Creek hired outfitters **Wayne and Barbara Plummer** to find and capture the grouse from Plum Creek lands in Maine. The Plummers, gently captured them with a telescopic noose pole. Most grouse were found by driving old logging roads and watching for birds. The birds were taken back to the Plummer's **Northern Pride Lodge, Kokadjo**, where they were housed and cared for until transport. In 2010, 29 grouse from Maine were released in Vermont.

If you observe banded grouse in NE Vermont, please contact Peter Emerson, VFW at 802-751-0485.

Bicknell's Thrush Monitoring

Objectives

- Contribute to regional Bicknell's thrush monitoring and research with partner **Vermont Ecostudies Center**.
- Participate in the **International Bicknell's Thrush Conservation Group** and Action Plan.

Status

The Bicknell's thrush is a species of concern in Vermont, Maine, and New Hampshire due to a declining population trend, for unknown reasons. In New England, it breeds in montane softwood forests at high elevations, typically near the tree line. In Canada, it also nests in regenerating clearcuts in lowland softwood forests. Much of its apparently suitable habitat in New England is unoccupied. It migrates to the Caribbean during the nonbreeding season, largely to the Dominican Republic, as far as currently known, and its population status may be impacted from habitat modification in these areas.

Mountain Birdwatch Program - Vermont Center for Ecostudies

- This monitoring program aims to study long-term trends in Bicknell's thrush and other mountain top species across four New England states and three Canadian provinces. Drs. Judith Scarl and Chris Rimmer, Principal Investigators. More info: http://www.vtecostudies.org/MBW/MBW2.0.html
- Data collected spans over 10 years and is collected on 116 different mountains.
- Observations of 11 target species are recorded on each survey route.
- Plum Creek surveys three routes (in ME & NH) and contributes data to the program.

Bicknell's Thrush captured and banded on the Kibby Mountain Birdwatch route as part of New York State Museum research, 2014.

Rusty Blackbird Monitoring

Objective

- Partner with the **Vermont Ecostudies Center, State University of New York, Maine Inland Fisheries and Wildlife,** and **New Hampshire Audubon** in collaborative research to better understand the species' ecology, population trend and management needs.

NH Audubon photo

Background

Rusty Blackbirds have shown population declines for the last four decades. Speculation on the decline includes loss or degradation of wetlands on wintering and breeding grounds, climate change and contaminant exposure. There remains an estimated 158,000 to 2 million Rusty Blackbirds in North America suggesting they are still relatively abundant at the continental scale. However, due to their unexplained range-wide decline, Rusty Blackbirds have been added to many lists of conservation concern, including Vermont's State Wildlife Action Plan (high priority Species of Greatest Conservation Need)

Rusty Blackbirds breed in the boreal forests of North America and winter in the southeastern United States. They use wooded wetlands for nesting and foraging. Rusty Blackbirds typically select young, dense conifer stands approximately seven to 15 feet tall and less than three inches diameter at breast height in which to nest. They forage on aquatic invertebrates in wetlands with shallow water and also use small seeps and other temporary water bodies in the uplands.

Vermont Projects

Vermont Center for Ecostudies & Private Landowners – Identification of habitat and landscape characteristics associated with successful long-term use of breeding sites.

Examples of nesting sites.

Deer Wintering Area Management

Objectives

- To maintain cover conditions at known wintering deer yards.
- To partner with the **Vermont Department of Fish and Wildlife** and the **Vermont Land Trust** on identification of wintering areas and habitat management.

Vermont Project

- A special management plan was developed in collaboration with the above partners to address a 1,070 acre deer wintering area with Weyerhaeuser's Conservation Easement. A successful harvest plan was implemented in 2014 to help promote softwood tree regeneration and maintain the future value of the area to wintering deer.

Post-harvest photos taken March 20, 2014 showing promotion of softwood regeneration through an overstory removal harvest (left) and a group selection cut to initiate regeneration (right).

Canada Lynx Monitoring

Objectives

- Coordinate and collaborate with **Vermont Department of Fish and Wildlife** who are conducting winter track surveys to assess lynx presence, distribution, and local breeding status.

Vermont Projects

During winter 2012, an approximate 70 kilometer route on the Silvi O'Conte NWR was surveyed twice by **Vermont Fish & Wildlife Dept**. One survey yielded five track intercepts and the second two intercepts. Both surveys documented a family group.

Examples of lynx tracks.

Vermont Moose Haul Reimbursement Program

Objectives

- To address severe moose browse on regenerating seedlings and saplings by incentivizing the public to hunt moose on Weyerhaeuser lands during the state hunting seasons.
- To facilitate outreach to the local communities and introduce Weyerhaeuser's environmental stewardship and land access policies.

Summary

Since 2009, Plum Creek has offered partial reimbursement of the moose haul contractor fee to the first three successful hunters on Plum Creek lands, for each day of the archery and rifle hunting seasons. Hunters receive a program flyer in their hunting permit package describing the program. If planning to hunt Plum Creek lands, they are asked to contact and preregister with Plum Creek. Hunters make their own arrangements with independent, state-permitted "horse haulers" who will haul the moose out of the woods for a fee. If successful, hunters are encouraged to call Plum Creek as soon as possible after the hunt. The first three calls to Plum Creek each day will receive a reimbursement of their horse haulers fee, up to $150.00.

To date, all callers have been reimbursed!

833 lbs, 52" spread, 20 pts

My family and I are forever greatful to allow us to hunt on your land. The assistance program is a bonus. We will refer anyone who asks in the future
Thank You
Dan Robitaille

Thank you for keeping the land open to the public for hunting. I got a bull that weighed 567 lbs 38" outside spread
THANK you AGAIN

Thank you so much for providing a place for people like me to hunt as well as this refund program. Thanks! Tom A.S

Henning I get my moose in Lemmington on Plum Creek Land. Thankyou for this program and for allowing us to hunt Plum Creek lands.
Jerry Yale

Retention Forestry

Objectives

1. To promote biodiversity in our managed forests by:
    a. Retaining a variety of structural features;
    b. Adding complexity and enriching the post-harvest forest;
    c. Maintaining certain ecological processes;
    d. "Lifeboating" certain species into the future as the next forest evolves;
    e. Keeping "common" species common.
2. To meet sustainable forestry certification standards that address biodiversity at both the stand and landscape levels.
3. To collaborate with **Manomet Center for Conservation Sciences** on the implementation.

Practical Applications

- Retention of snags, legacy trees, den and cavity-rich trees, and down logs.
- Retention of upland patches of varying sizes and shapes in larger clearcut settings.
- Training and identification of late-successional stands or patches using a Late-Successional Index.
- Incorporating patches into the harvest design that capture unique habitats and features, such as vernal pools, seeps, wetlands, flowages, intermittent streams, etc.
- Creation of early successional habitats in landscapes dominated by intermediate and mature forests as a method to promote biodiversity, especially in New England where early successional habitat is transient due to rapid vegetation growth.

Research Collaboration Examples

Manomet Center for Conservation Sciences

(see Mosaic Science Notes #2003-1, April 2003, "Legacy Retention: a tool for retaining biodiversity in managed forests" - available from Manomet)

Rare Plants and Communities Conservation

Objectives

- To conserve exemplary sites of rare plants and communities.
- To partner with the **Vermont Fish & Wildlife Department** in identifying potential sites.

Pitcher plant and sphagnum mosses in peat bog.

Vermont

- Six sites are identified with special importance to rare plants/communities:
  - Ferdinand Bog Watershed – Complex of natural communities, including dwarf shrub bog and poor fen.
  - Mud Pond Watershed – Dwarf shrub bog with several rare plants.
  - South America Pond Watershed – Site for the northeastern bladderwort.
  - East Mountain Old Growth Area – Exemplary site of montane spruce-fir forest, containing spruce trees more than 260 years old.
  - Willard Mountain Old Growth Area – Site of two small red pine forests approximately 170 years old.
  - Unknown Pond, Avery's Gore – Site for the bog aster.

Red pine with bear clawing, Willard Mountain Old Growth Area, VT

Bog example

Invasive Species Monitoring

Objectives

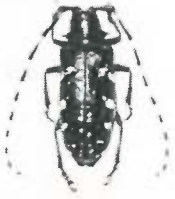
- Coordinate & collaborate with the **Vermont Department of Forests, Parks, & Recreation**, **The Nature Conservancy**, the **U.S. Fish and Wildlife Service** and others to address invasive species (plant & insect).
- Train staff in identifying invasive species.
- Gather information on certain species' locations on Weyerhaeuser land and transfer information to partners or implement control actions in the field as appropriate to address certain species and sites.

Collaboration

Vermont: Weyerhaeuser is part of the Upper Connecticut Cooperative Invasive Species Management Area, a cooperative led by the USFWS. We have contributed funding toward regional intern survey efforts.

Training

In July 2010, Rose Paul, TNC, provided a field session on identification and control methods. Species ID cards/brochures/info sheets have been distributed to staff.



Emerald Ash Borer (top) and Asian Long-horned Beetle (bottom)

Invasive Site Identification and Control

Staff GPS invasive species sites for data transfers to partners and, when feasible, implements actions to control the site (e.g., hand pulling non-native honeysuckle, herbicide control).

Experimental projects are underway to control Common Reed (*Phragmites australis*) patches found along forest roads. Following methods from training sessions with TNC, stalks are cut and a retail herbicide applied to the cut ends. So far, the technique looks promising. Monitoring will occur to evaluate the efficacy of the treatment and the need for any follow up. (*"Before" & "after" photos below*)

Stream Habitat Enhancement

Objectives

- To quicken the ecological recovery of stream habitat impacted by historical log drives;
- To collaborate with partners **Trout Unlimited** and the **VT Fish & Wildlife Department** to better understand the value of these efforts, develop more efficient and scale-able strategies to result in a greater landscape benefit;
- To create demonstration sites to communicate results and techniques to other landowners.

Background

Historically, to move logs more efficiently, many streams were modified to maintain water flow and prevent logjams, including blocking side channels and bulldozing logs and boulders out of the stream. These practices resulted in entire stretches of streams lacking in-stream structure and pool diversity, features important for fish and other aquatic life. Although nature is resilient and streams are repairing themselves already, purposeful and designed stream enhancement will hasten the recovery.

Locations & Techniques

- E. Branch Nulhegan River and upper tributaries (Fisher Bk, Spaulding Bk).
- Fell key trees into and across the stream channel (termed "large wood additions"), using trees in locations where adequate stream shading canopy exists. Select trees may be pushed over so the root wad can function as a habitat-forming element over time.
- The approach simulates the natural processes in forming in-stream habitat complexity.

Monitoring

- Pre- and post-treatment monitoring to estimate fish community composition, habitat and water quality and geomorphic stability (Kratzer & Norton 2012).

(L) Birch with root wad set into Intervale Bk, ME. (M & R) Two examples of "chop and drop" in the upper and middle portions of the East Branch Nulhegan River, VT. Fall 2012.

Vernal Pool Conservation

Objectives

- To identify and conserve ecologically significant vernal pools;
- To train staff foresters and logging contractors on vernal pool identification;
- To collaborate with others to better understand vernal pool ecology and management needs.

Background

Vernal pools are temporary wetlands that fill with water from snow melt, rain or ground-water connections in the early spring and typically dry out by mid or late summer. They have no permanent surface connections to streams and therefore have no predatory fish, enhancing their function as a breeding hotspot for several amphibians and invertebrates, such as the spotted salamander, blue-spotted salamander, wood frog, and fairy shrimp. For these amphibians, the pools are used only for breeding and the development of the eggs and young; the rest of their time is spent in the surrounding forest. The pool area is also used by a wide variety of other biodiversity.

Conservation Actions

- Vernal pool location data are requested from State Resource Agencies.
- Foresters identify vernal pools in the field during harvest reconnaissance and layout.
- Vernal pool locations are stored in the company's GIS program that alerts foresters to special sites during the management activity planning process.
- During forestry operations, vernal pools are identified by flagging and protective buffers and instructions that aim to:
    - Protect the pool bank and integrity
    - Avoid and minimize soil erosion and water quality impacts
    - Maintain pool temperature regimes by retaining shade
    - Maintain terrestrial habitat features surrounding the pool by retaining adequate shade for ground moisture conditions and down wood for cover and foraging habitat.

Spotted salamander, blue-spotted salamander, wood frog (with their respective egg masses).

Vermont Woodland Owner Survey 2014
Final Project Report

Sarah M. Butler, Brett J. Butler, Jaketon H. Hewes

December 19, 2014

Project funded by the Vermont Department of Forests and Parks.

Project coordinated by the Family Forest Research Center (www.FamilyForestResearchCenter.org), a joint venture between the U.S. Forest Service and the University of Massachusetts, Amherst.

For additional information about this report contact: Sarah Butler (413-545-6641; sbutler@eco.umass.edu) or Brett Butler (413-545-1387; bbutler01@fs.fed.us).

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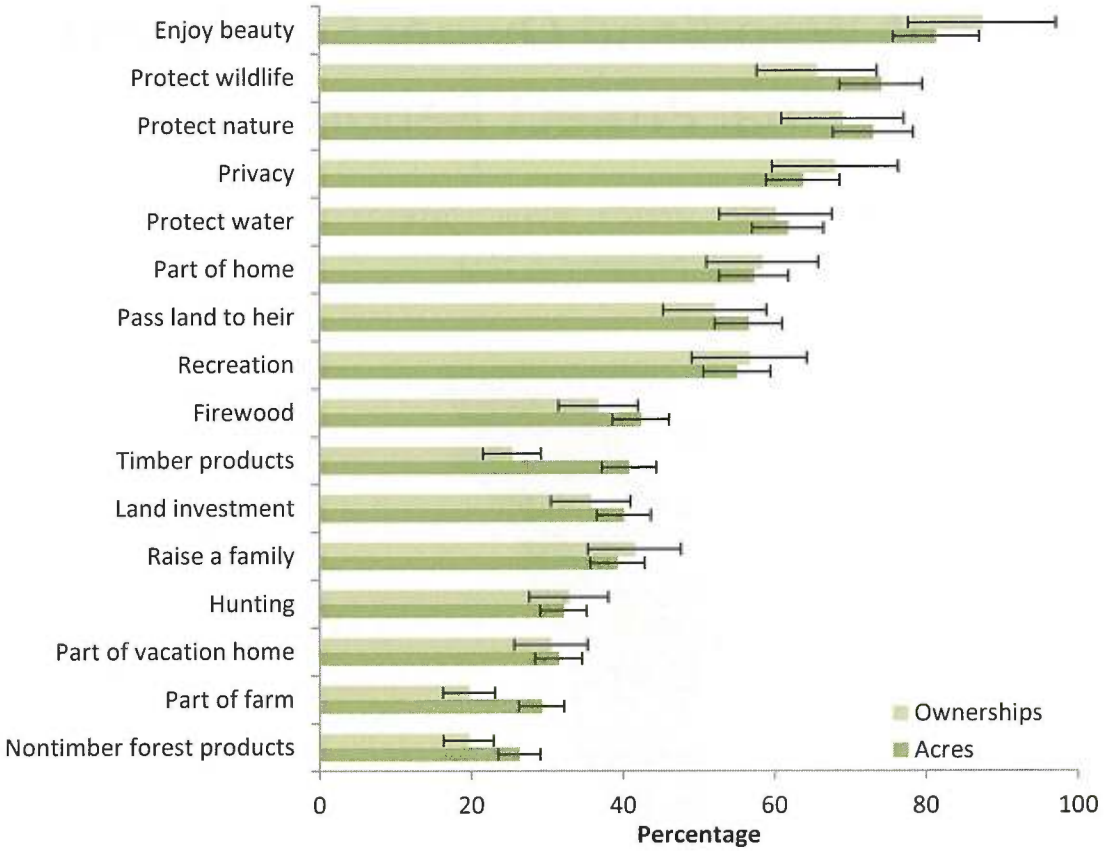

Figure 1. Percentage of family forest land and ownerships (with 10+ acres) by reason for owning forest land. Percentages reported are population level estimates for those who responded that the reason for owning was important or very important.

Pages 1, 8 and 24 of the report

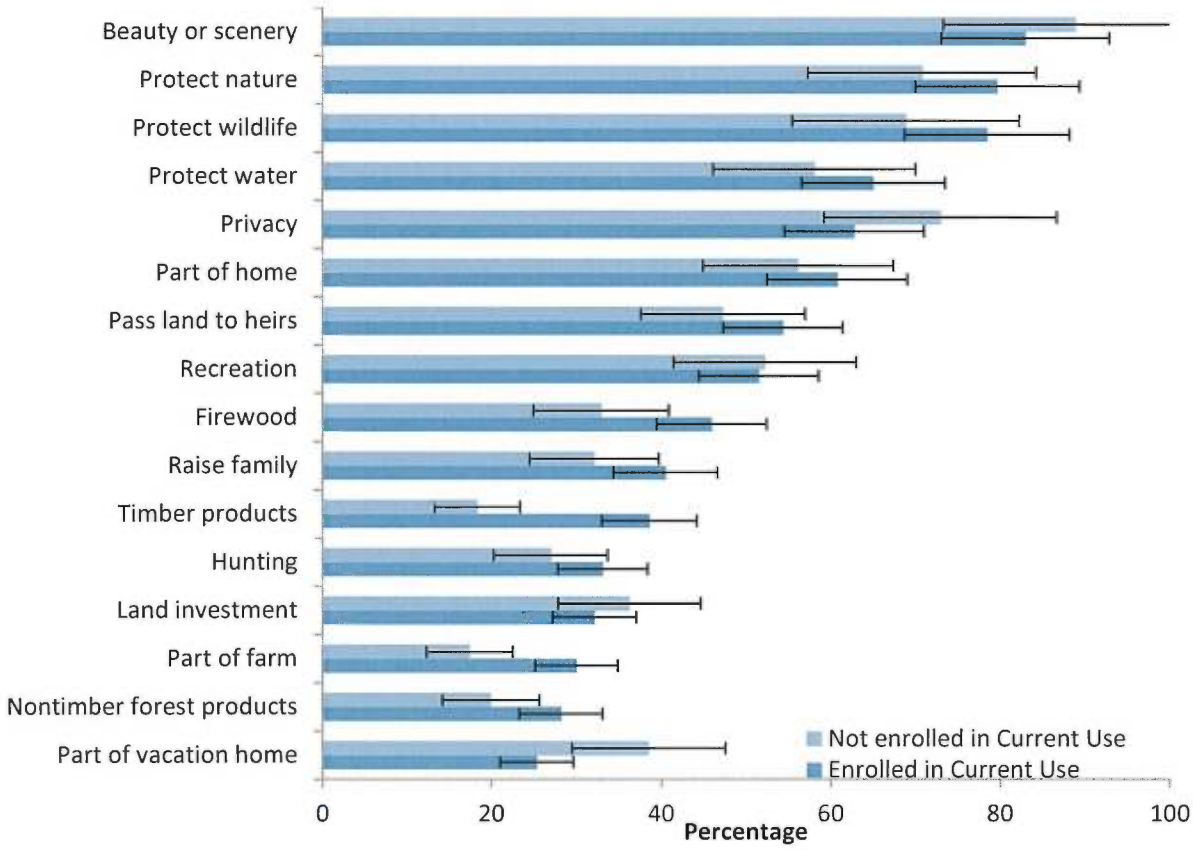

Figure 2. Percentage of family forest ownerships (with 25+ acres) enrolled or not enrolled in the Current Use program by reasons for owning their forested land in Vermont

Pages 1, 8 and 24 of the report