

Forest Stewardship:

Rhode Island Landowners Discover New Strategies in Forest Conservation

Support healthy and sustainable forests with innovative business activities that meet your needs and contribute toward sustainable forest management.



INTRODUCTION



The forest products industry in Rhode Island represents 3.3 percent of manufacturing jobs with an annual payroll income of 22 million dollars.³



Forests in Rhode Island provide habitat to 86 species of mammals, 394 species of birds, 19 amphibians, and 26 species of reptiles.



According to a DEM survey, one to five percent of forest landowners have commercially harvested an alternative forest product, including maple syrup, mushrooms, witch hazel, and floral greens.



Of all sectors of development farm, forest, and open space produce the greatest financial incentive for municipalities. For every dollar of revenue generated by undeveloped land towns spend an average of 42 cents on public services, leaving 58 cents to offset other municipal expenses.

Rhode Island's forests provide many benefits including clean air and water, habitat for wildlife, aesthetic values, places for recreation, as well as economic opportunities. Considering that they enhance the quality of life in Rhode Island, it is in everyone's best interest to insure the protection and wise management of the state's forest resources.

Despite recent land conversion, about 59 percent (394,590 acres) of Rhode Island is now forest. Most this forestland is under private ownership, with over 70 percent controlled by individuals and families, and issues affecting these landowners have a direct impact on the current and future use of Rhode Island's forests.

To many forest landowners economics and preservation go hand in hand since they rely on revenue from their forest to pay property expenses. The small size of most parcels and long-term nature of forest management make harvesting traditional wood products on a sustainable basis difficult for most forest owners.

Developing markets for specialty products, such as edible and medicinal plants, decorative products, and forest-based recreation, serve as a means to provide an alternative income stream. Forest landowners can supply products for these niche markets.

This publication is part of an effort by DEM, which included publications, workshops, and challenge grants, to increase landowner awareness about forest management opportunities that prevent fragmentation of forest land by providing a way to pay property expenses so the land does not have to be sold for development.



75 percent of Rhode Island residents depend on surface water reservoirs for drinking water. Forests play an important role in maintaining water quality and quantity. Protecting forests in water supply basins is a strategy used to ensure safe and plentiful drinking water supplies.



Many Rhode Islanders participate in forest-based recreation: 31 percent participate in nature watching, 17 percent in camping, 14 percent in hiking, five percent in equestrian trail use, four percent in off-road vehicle use, and three percent in hunting.²

LANDOWNER PROFILES

Wayne and Ruth Anderson - Exeter

Wayne Anderson has been working in the forest harvesting since he was a teenager. His business specializes in timber harvesting throughout Rhode Island. The timber he harvests is sold to sawmills in Rhode Island and nearby Connecticut. He also sells about 350 cords of firewood a year to homeowners. Most of the trees he harvests come from the property of private landowners who thin their forest to promote the growth of the forest and improve to wildlife habitat.



Wayne Anderson received a grant from DEM to cultivate mushrooms to grow a high value forest based crop that will eventually pay some of his property ownership expenses. .

Typical of many Rhode Island forest owners he owns a small parcel, only 7 acres. He is also an avid gardener and grows a large portion of his family's food. Also an avid wild mushroom collector after learning about cultivating mushrooms on hardwood logs he decided to pursue that as an alternative source of income.

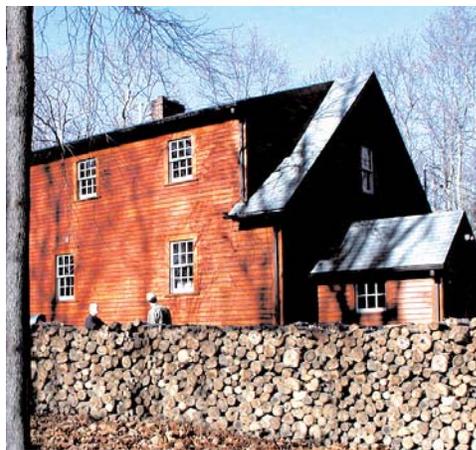
Some trees that would otherwise be used as firewood are inoculated with mushroom spores and stacked in the forest for about a year until mushrooms develop. The mushrooms are picked and then sold at a friends farmstand.



Wayne Anderson and sons actively manage their seven acre property, growing both shiitake and oyster mushrooms on trees harvested from the forest.

Steve Thomas - North Scituate

Steve Thomas has managed his 50 acre property for over two decades doing much of the work himself including harvesting timber, firewood, witch hazel, and other forest products. A recent commercial harvest, done by a local sawmill, removed hardwood trees. The lumber from some of these trees was in turn used in the renovation of his house.



A recent commercial harvest of Steve Thomas' land, done by a local sawmill, removed hardwood trees. The lumber from some of these trees was in turn used in the renovation of his house

This property serves as an outstanding example of forest stewardship and is covered with a diverse, healthy forest which is home to many species of wildlife. Cork Brook, a tributary of the Scituate Reservoir, flows through the property making conservation of the property key for protecting the quality of drinking water for Rhode Islanders.

DEM has purchased a conservation easement on the property of Steve Thomas through a grant from the USDA Forest Service, Forest Legacy Program. The objective of this program is to promote and protect traditional forest values and uses by preventing the conversion of forestland to non-forest uses. Under the terms of the easement, the property cannot be developed, although Mr. Thomas will continue to own and manage the property following the recommendations of a written forest management plan.

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Steve Thomas' property is protected from development through a conservation easement purchased by DEM through a Forest Legacy Program grant.

LANDOWNER PROFILES

Charles Chase - Coventry

As a teenager Charlie Chase helped his father on their Christmas tree farm and tree nursery in western Coventry. He became interested in maple syrup



Charlie Chase gives a tour of his maple sugaring process to a group of students.

after visiting a sugarhouse in Foster and seeing sap boiled to make syrup. He starting tapping maple trees on his family's property as a 4H project and expanded onto surrounding property.

With the purchase of 45 acres adjacent to the family homestead Charlie has maintained his avid interest in actively managing his land. He now has one of the largest maple syrup operations in Rhode Island selling to over 100 stores and restaurants. He taps trees within a 20-mile radius of his home, with 1300 taps, and plans to expand to 2000 next year. Charlie is so optimistic about the future of maple syrup production that he recently planted 500 sugar maple seedlings to provide him with trees to tap closer to home. "Although it will take at least twenty years before I can harvest sap from these trees, my eight year old daughter Becky will appreciate my efforts later," says Chase.

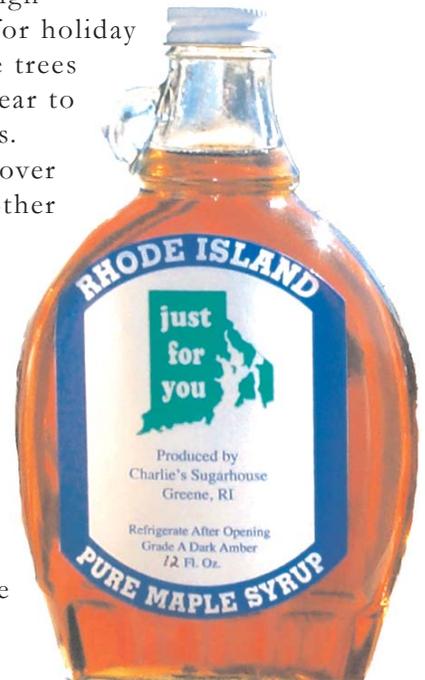


Charlie Chase recieved challenge grants from DEM, through the USDA Forest Service Economic Action Through Forestry Program, for establishg floral greens and maple syrup production on his propety in Coventry.

In addition, Charlie has pursued alternative

means of generating income. Twenty years ago he planted noble fir seedlings, intending to harvest them for Christmas trees. The demand for this species is low so they were never cut. The dark green foliage is in high demand by florists for holiday decorations so these trees are trimmed every year to provide floral greens. Charlie has planted over 2,000 seedlings of other conifer varieties, including grand, Korean, and con-color fir.

Charlie stands out from many forest owners in that he manages his property as a working forest, using revenue generated by forest-based businesses to pay expenses so he can afford to own it.



Charlie Chase uses revenue generated from his forest based business to pay property expenses.

Carolyn Vallese - Glocester

On a 28-acre parcel near Chepachet Carol Vallese is starting a business using forest plants for decorative displays.

She uses greens from native plants for floral arrangements. Carol has established additional plants like holly, mountain laurel, and cedar along the edge of and in small openings in the forest



Carolyn Vallese uses greens from native plants to create floral arrangements and decorative displays.

on her property. She uses the material for creating swag, garland, and wreaths and markets the products at craft fairs, local businesses, and on her property using roadside displays.

LANDOWNER PROFILES

Wright's Farm - Burrillville

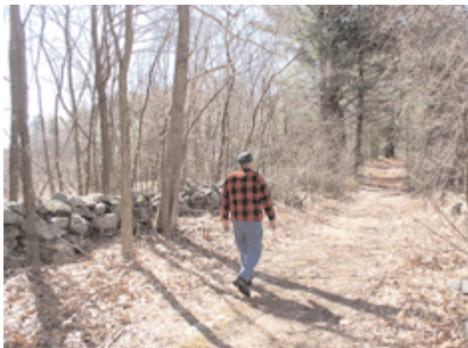
Al, John, and Paul Wright inherited their 153 acre Tree Farm from their parents who sold the development rights to the Forest Legacy Program to insure the property will continue to be used as a working forest. Stone walls criss crossing through the forest indicate the parcel was a farm at one time but reverted to forest. The property was used as a hunting club before being purchased by John and Gertrude Wright in 1961.



Wright's Farm in Burrillville is protected from development through a conservation easement under the Forest Legacy Program.

The property has always provided a portion of the family's income with trees typically harvested every ten years. Products harvested include firewood and sawtimber (some of which was processed at a local sawmill). Recently, however, the Wrights' have begun looking at the potential of non-timber forest products to supplement their income.

The family has planted a variety of conifers for Christmas trees, has tapped maple trees for syrup, and have harvested woodland plants for use as floral greens during the holiday season. He is currently investigating the feasibility of harvesting witch-hazel on the property, as well as opportunities for growing medicinal plants.



A system of trails provide access through the property for recreation and forest management.

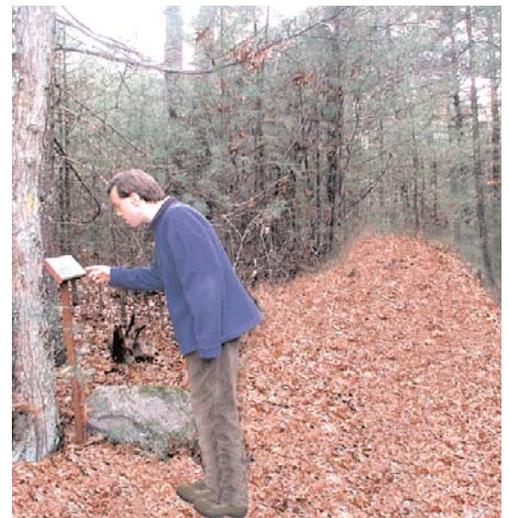
Now under active forest management for more than four decades the property is an outstanding example of how careful forest stewardship can be used to provide for current expenses while supporting a healthy and productive forest for future generations.

Apeiron Institute for Environmental Living - Coventry

Founded as a non-profit organization in 1994, the Apeiron Institute for Environmental Living is working to bring sustainable living practices from around the world to this region. The Institute is based on a on a 55-acre forested tract in Coventry. The property, which is open to the public, houses examples of environmentally friendly building technologies, renewable energy, sustainable agriculture, and green business practices. The property is also home to Camp Hamilton, owned and run by the Nickerson Community Center.

The Institute received assistance from the Rhode Island Chapter of the Society American Foresters to develop a forest stewardship plan for the property and has collaborated with that group to hold tours on the property to educate the public about the benefits of forest management.

They have also developed a trail system through the forest that includes a series of educational signs to inform visitors about the forest. The organization relies on donations from trail users to fund educational programs and markets the trail to potential users through their website (www.apeiron.org) and email database.



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LANDOWNER PROFILES

Ron and Mary Fasano - Richmond

Ron and Mary Fasano bought their 41-acre parcel near Arcadia Management Area in north-western Richmond in 1978. In 1980, the property was defoliated by gypsy moths and their first forest management activity consisted of removing dead and dying oaks.



Management since that time has focused on improving habitat to increase the variety of wildlife species on the property as well as improving access for hiking and nature watching. Their land is surrounded by mature forest so recent activities have focused on creating openings. Those

clearings will revert back to forest, creating a patchwork of mature and young forest on the property.

The Fasano's became active in the American Tree Farm System soon after they purchased their property. The American Tree Farm System is a national program sponsored by the American Forest Foundation, committed to sustaining forests, watersheds and healthy habitats through stewardship of private landowners. Properties certified as Tree Farms must have written forest management plans, comply with standards and guidelines developed by the American Forest Foundation, and pass inspections by a volunteer forester every five years. Ron



Ron Fasano has created 5 acres of openings on his property to enhance habitat for wildlife.

is active on the Rhode Island Tree Farm Committee which insures program standards are met and organizes educational workshops for forest landowners.

Southside Community Land Trust - Cranston

Formed in 1981, the Southside Community Land Trust encompasses a network of community gardens in Providence; The Broad Street Farmers' Market; and Urban Edge Farm, a 50-acre parcel in western Cranston. The later, purchased by DEM in 2002, is a former dairy farm that has been leased to the Land Trust for a farm business incubator program and also serves as a educational site for children and adults.

Southside Community Land Trust recently began growing shiitake and oyster mushrooms to diversify the crops grown at the farm and to satisfy the demand for



The Southside Community Land Trust received a grant from DEM to inoculate 200 logs with shiitake and oyster spawn to grow mushrooms and provide another locally grown product to be sold at the Broad Street Farmers market.

locally grown products. The mushrooms will be sold at two local farmers' markets and through the Land Trust's Community Supported Agriculture Program. According to Pat McNiff, farm manager, "This combination provides a perfect opportunity for Southside Community Land Trust to demonstrate a viable project that can be copied by other landowners who wish to diversify their operations and increase their income potential."

CONCLUSION

Sustainable forest management meets the current needs of landowners without compromising the health or integrity of the forest for future generations. This includes a wide range of values from clean drinking water, to economic opportunities, to biological diversity. Since they own most of the forest in Rhode Island, private landowners play a critical role in ensuring sustainably managed and healthy forests.

Although management for traditional wood-based forest products is difficult in Rhode Island because of the small size of most parcels, there are a variety of alternatives, like mushrooms, maple syrup, witch hazel, or hunting leases that can provide landowners with a means to generate income to pay their property expenses so that they are not forced to sell their land for development.

At one time most Christmas trees used in Rhode Island were imported from other areas. Rhode Island landowners recognized this as an opportunity and now locally grown Christmas trees are a viable industry in Rhode Island. Forest landowners can also take advantage of markets for locally grown products and alternative forest crops provide the opportunity to contribute to the sustainable management of Rhode Island's forests. Enhancing the health of the forest, stimulates the local economy and conserves the forest for future generations.

ADDITIONAL RESOURCES

RI DEM, Division of Forest Environment
1037 Hartford Pike
North Scituate, RI 02857
(401) 647-3367

PUBLICATIONS

Forest Landowners Guide to Internet Resources
<http://na.fs.fed.us/pubs/misc/flg/>

Planning for Forest Stewardship: A Desk Guide.
www.fs.fed.us/spf/coop/library/Forest%20Stewardship%20deskguide.pdf

URI Cooperative Extension: Today's Forest Tomorrow's Legacy
http://www.uri.edu/ce/wq/has/html/has_woodscaping.html

WEBSITES

RI DEM Alternative Forest Uses Website
<http://www.dem.ri.gov/programs/bpoladm/stratpp/forprod/forstprd.htm>

RI DEM, Division of Forest Environment
<http://www.dem.ri.gov/programs/bnatres/forest/index.htm>

RI Forest Conservators Organization
<http://www.rifco.org/>

RI Natural Resources Conservation Service
<http://www.ri.nrcs.usda.gov/>

USDA, Forest Service, Forest Stewardship
<http://na.fs.fed.us/stewardship/index.shtm>

Literature Cited

- 1 *Public Water Supplies in Massachusetts and Rhode Island: Investigations of Processes Affecting Source Water Quality*, US Department of the Interior, US Geological Survey, April 1997.
- 2 *Ocean State Outdoors: Rhode Island Comprehensive Recreation Plan*, State Guide Plan element 152. Statewide Planning Program, March 2003.
- 3 *Rhode Island Forest and Paper Industry at a Glance*. American Forest and Paper Association. 2001.
- 4 *Cost of Community Services in Southern New England*. Southern New England Forest Consortium. 1995.
- 5 *Rhode Island Forest Landowners Survey Report*. Rhode Island DEM, Division of Forest Environment. 2004
- 6 *Rhode Island Forest Resources Management Plan*, State Guide Plan Element 161. March 2005

Photographs

- cover:* L to R
Bruce Payton, Dan Lawton, Bruce Payton,
Gregg J. Cassidy, Bruce Payton, Paul Ricard
- p. 1:* Clockwise
Bruce Payton, Bruce Payton, Bruce Payton,
Kimberly Anderson, Bruce Payton, Melinda
Hopkins
- p. 2:* Clockwise
Gregg J. Cassidy, Timothy Libby, Ruth
Anderson, Ruth Anderson
- p. 3:* Clockwise
Debra Page Trim, Joseph Vallese, Gregg J.
Cassidy, Debra Page-Trim
- p. 4:* Clockwise
Gregg J. Cassidy, Gregg J. Cassidy, Paul
Ricard
- p. 5:* Gregg J. Cassidy
- p. 6:* Timothy Libby

