

# Economic and Community Development *through* Community Forests

Based on the success of  
13 Mile Woods Community Forest  
in Errol, N.H.

**Errol, a small town in northern New Hampshire, has demonstrated that there are real economic and community benefits from keeping forests as forests. The town's vision of owning and managing its own forestland resulted in the best of both worlds: a conservation project that has a direct positive effect on the local economy and supports quality jobs based on a healthy working forest.**

The 7,100-acre 13 Mile Woods Community Forest provides jobs, wildlife habitat, access for recreation, revenue to the town, and opportunities for research and education. It is also a long-term asset and a highly successful investment strategy for the community.

13 Mile Woods Community Forest highlights an effective public ownership model that can serve as an alternative to federally protected areas or private timberlands, the latter of which is increasingly subject to short-term ownership changes.



Photos: Jerry Monkman

## The Model

The Community Forest model promotes conservation and community and economic development through community ownership and management of forestland.

## This Summary

This summary is based on an economic analysis prepared by the Donella Meadows Institute for the Community Forest Collaborative (see pg. 4).

In 2005, Errol residents viewed the purchase of 13 Mile Woods as a way to generate numerous community benefits:

- maintain the rural character of the town and its scenic gateway
- drive economic activity in the local forestry and recreation economies
- generate revenue from sustainable forest management
- provide recreational assets such as trails and river access
- provide permanent access to the forest and the river for professional guides and tour businesses
- provide permanent public access for birding, hunting, fishing, swimming and boating.

## Community Impacts

Together, the conservation easement and the principles of long-term stewardship and sustainable forest management embedded in the Community Forest model ensure that the forest will be managed to produce timber revenue and provide economic benefits back to the town, acting as a long-term, low-risk investment.

The Community Forest model promotes community participation in management decisions, which can provide new volunteer leadership opportunities and help build community capacity.

**The Community Forest model holds significant promise for rural, forest-based communities across the United States.**

## Successes

- Permanent conservation of 7,100 acres of working forestland, prime wildlife habitat and scenic views.
- Strong local governance and direction.
- Investment in key recreational upgrades.
- \$3.7 million in total timber sales; net revenue \$1.7 million.
- Direct support for 2 local jobs annually (full-time equivalents) in forestry and logging; indirect support for up to 10 jobs annually in other sectors of the forest economy.
- Revenues from sustainable timber management paid for 50% of initial purchase loan within seven years and will yield approximately \$100,000 per year in the future, which could meet 10% of Errol's typical annual municipal budget.

## Make it Happen

To help other communities realize conservation and economic benefits from Community Forests, the Trust for Public Land and the Northern Forest Center recommend:

- Congressional full funding of the U.S. Forest Service's Community Forest & Open Space program at \$5 million annually.
- State investment in New Hampshire's Land & Community Heritage Investment Program, Land for Maine's Future, and the Vermont Housing & Conservation Board to provide funding to communities seeking technical assistance, project expenses and capital for purchases.
- Private philanthropic donors can help by recapitalizing the Community Forest Fund at the Open Space Institute.

# TIMBER HARVESTS: Revenue & Jobs



## 13 Mile Woods Generates Timber Revenue

- Total timber sales exceeded \$3.7 million and total net revenues were over \$1.7 million from 2006 – 2012.
- Payments to local logging contractors were over \$2 million.
- Revenues were used to pay off 50% of initial purchase loan and interest within seven years.
- Planned sustainable harvest levels typically at 2,000 cords or more per year which could net close to \$100,000 per year.
- Eventual sustainable timber harvest amounts could represent 10% of Errol’s typical annual municipal budget.

### Revenues 2006 – 2012

<b>Total Gross Revenue</b>	<b>Total Net Revenue</b>
\$3,714,864	\$1,705,599

### Estimated harvesting and net revenue 2013 – 2022

<b>Total Estimated cords</b>	<b>Total Net Revenue</b>
22,229	\$1,070,000

### Timber Output and Stocking

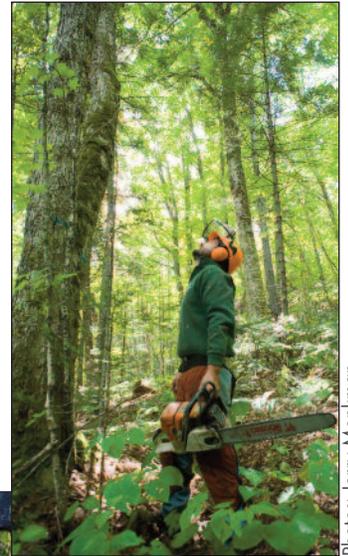
- In the first seven years, 13 Mile Woods yielded 32,425 cords of timber from the original 5,300 acres.
- A 2012 inventory of the expanded 7,100-acre forest showed a well-stocked residual forest with 124,248 cords in timber volume for a total estimated stumpage value of over \$5.9 million.

## 13 Mile Woods Creates Harvesting Jobs

A timber management program with harvesting includes a forester, logging contractor and employees, and truckers. Each contractor may have multiple operations going on at any time, therefore jobs are calculated indirectly, using standards, multipliers, and full-time equivalencies.

According to *Economic Impacts of the 13 Mile Woods Community Forest in Errol, New Hampshire*, a forest the size of 13 Mile Woods Community Forest can contribute to employment in the region by supporting 12 jobs annually:

- 2 in forestry and logging
- 6 in wood products
- 2 in pulp and paper
- 2 in furniture and related products



Photos: Jerry Monkman



## Effects of Timber Sales in the Local Economy

Economic multipliers indicate how much an increase in timber sales can ripple through the economy resulting in increased total economic impact, earnings, and jobs in the supporting sectors. Ripple effects are higher for goods and services produced locally, such as timber, lodging and restaurant services. In rural regions, keeping dollars local is the best way to build stronger economies and recirculate dollars multiple times.

Based on multipliers developed by the Bureau of Economic Analysis, timber sales from 13 Mile Woods in 2006 resulted in a total output of more than \$3 million dollars across the counties of Coos, NH, and Oxford and Franklin, Maine.

In the same area, total earnings resulting from logging—calculated as just under 36 percent of total sales—were estimated at \$644,873 in 2006. As timber harvests decreased in volume, so did the direct and indirect impacts on the forest industry.

### Multiplier effects of timber (not adjusted to current dollars)

Year	Total sales <i>(actual)</i>	Total Economic Impact <i>(based on 1.8 multiplier)</i>	Total earnings <i>(calculated as 35.8% of earnings)</i>
2006	\$1,799,311	\$3,314,150	\$644,873
2007	\$892,391	\$1,643,694	\$319,833
2008	\$288,651	\$531,667	\$103,453
2009	\$525,274	\$967,503	\$188,258
2012	\$209,237	\$385,393	\$74,990

# RECREATION: Revenue & Jobs

## Recreational Revenues

Services supporting visitors and tourism rank second in economic importance in the region, behind forestry and forest products. Along with the Androscoggin River, much of the Umbagog National Wildlife Refuge and two state parks with campgrounds are also located within Errol. The town's economy is very dependent on snowmobilers, anglers and other visitors who spend money on food, gasoline, and lodging.

Ownership of the 13 Mile Woods Community Forest provides an important recreational asset, though revenue derived can be a challenge to document. Benefits from this ownership include:

- protection of the scenic approach to the town center
- proper management of the forest resource which ensures high quality water in the streams feeding the Androscoggin River, an important resource for fishermen and boaters
- an expansive and integrated snowmobile trail system within the town, with important component located in the Community Forest.

The state of New Hampshire tracks visitor spending for a variety of recreational activities. The following data is extracted for the Errol area.

### Recreation Near Errol, New Hampshire

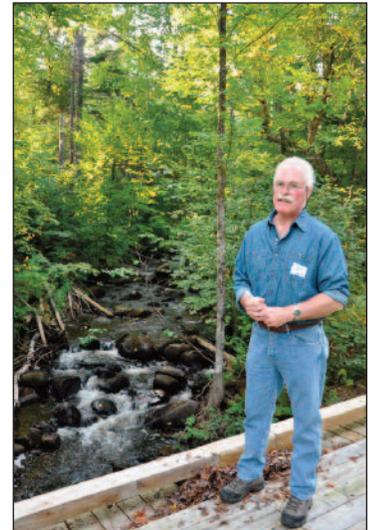
The high natural quality of the forest and the proximity to the Androscoggin River make the Community Forest a primary recreational asset. Data for recreational visits to Errol are based on visits to the area including 13 Mile Woods, Mollidgewock State Park, and Umbagog National Wildlife Refuge and on state spending data.

- Every 1,000 acres of forest supports 2.4 forest-based recreation and tourism jobs (NEFA 2011).
- Snowmobiling, fishing and hunting contributed more than \$2.2 million total to the Errol area through visitor spending in 2012.
- Estimated revenues from ATV recreation, assuming that the planned ATV trail is completed, could result in an average of 3,000 visitors and more than \$400,000 in additional spending in the first year after completion.
- Sporting guides bring out-of-state visitors to the forest and river for hunting and fishing experiences.
- Applying multipliers to recreational visitor data indicates that recreational activities support more than 20 jobs in the Errol area, though only some of this can be attributed to the Community Forest.

## Visitor spending

- Annual visitor spending of more than \$2.2 million for snowmobiling, fishing, and hunting in 2012.
- Snowmobiling brings around \$1 million per season to the area.
- Hunting and fishing bring \$1.24 million to the area.

Snowmobiling, ATV riding, hunting and fishing take place in the Community Forest and are identified in the 13 Mile Woods Stewardship Plan as activities that are important to local recreationists and tourists. Use of the river continues to increase, but activities such as canoeing, kayaking, and tubing are difficult to track without intensive surveys. The Community Forest is open to hunters and is located in one of the most popular areas for hunting in the state.



**“If not healthy forests and clean water, why else would visitors come?”**

Bill Freedman  
Former Errol Selectman

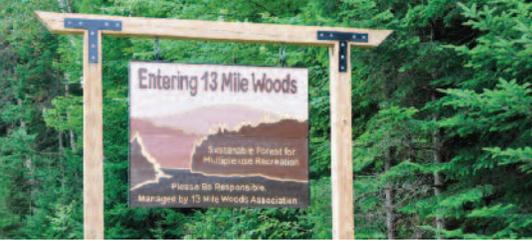
## 13 Mile Woods Supports Tourism Jobs

Economic multipliers indicate how much an increase in tourism spending can result in increased total output, earnings, and jobs by stimulating demand for goods and services in the supporting sectors. The tourism earnings multiplier tends to be higher in larger regions and lower in smaller regions where earnings leak out of the economy because of the need to import goods and services to satisfy tourism demand. In addition, job estimates can be distorted by part-time and seasonal positions and different wage rates across sectors.

Economic multipliers applied to the recreation use data for the Errol area indicates support for approximately:

- 11 jobs related to snowmobiling, 5 of which are in the hospitality sector.
- 5 jobs related to ATV use.
- 7 jobs related to hunting.
- 4 jobs related to fishing.

Increased hospitality capacity in Errol, especially in lodging, could increase the number of jobs available. Every \$1 million dollar increase in spending on lodging would create 13 full- or part-time jobs.



# 13 MILE WOODS

## Achieving a Community Vision

### Pressure to Act

20-25% of all privately owned forestland has changed ownership since 1978 and approximately 75% of industry-owned private forestland has changed hands between 1996 and 2005 (Little, 2005).

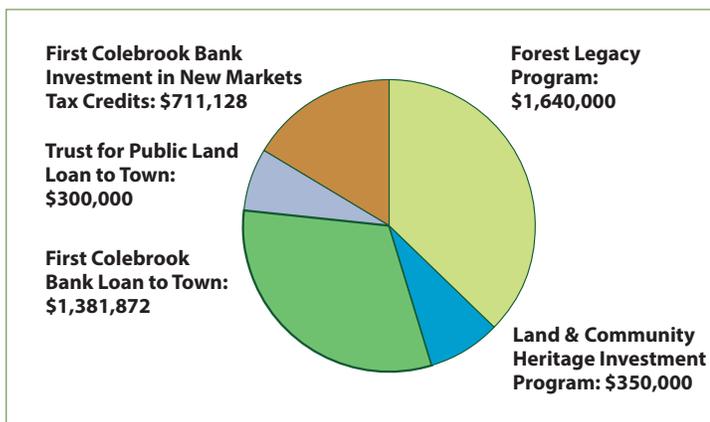
In 2005, with help from the Trust for Public Land and the Northern Forest Center, the Town of Errol, N.H., met the challenge of constantly changing local landownership by creating the 13 Mile Woods Community Forest. Two purchases totaling 7,108 acres of forestland achieved the town's goals of maintaining the rural character of the town and contributing to the town's economic development.

In keeping with the Community Forest model, residents are engaged in management decisions for the property. Errol's plan prioritizes sustainable timber yield, recreation and community access benefits, and

protection of the scenic entrance into town.

### Financing the Acquisition

The Trust for Public Land and the Northern Forest Center helped structure the town's purchase of the land from the Lyme Timber Company. The Trust for Public Land led on raising public funds and the Center facilitated subsidized New Markets Tax Credit financing, working with CEI Capital Management. The total purchase price was for the initial 5,269 acres was \$4,050,000 (see chart for breakdown of revenue sources for the purchase plus transaction costs).



The **Trust for Public Land** creates parks and protects land for people, ensuring healthy, liveable communities for generations to come.

The **Northern Forest Center** creates economic opportunity and community vitality from healthy working forests in Maine, New Hampshire, Vermont and New York.



Charlie Kurtz shows off the snowmobile trail built in 13 Mile Woods to connect vital winter recreational routes and draw more winter visitors to the businesses in Errol, N.H.

### About this report

The Trust for Public Land and the Northern Forest Center have worked



**Northern Forest Center**  
Thriving Communities & Healthy Forests



THE TRUST for PUBLIC LAND

together in the Community Forest Collaborative

to help expand community ownership and management of forestland in northern New

England by building on the tradition of town-owned forests.

To document the benefits of community-owned forests, the Collaborative commissioned a study of the economic impact of 13 Mile Woods based on data from its first seven years (2005 - 2012) of ownership. *Economic Impacts of the 13 Mile Woods Community Forest* was written by Elizabeth Reaves and Marta Ceroni of the Donella Meadows Institute.

Thanks to the U.S. Endowment for Forestry & Communities for supporting the economic assessment.

### Resources Online

The full economic analysis of 13 Mile Woods Community Forest and the following resources are available online:

- Description of the Community Forest model
- *Community Forests: A Community Investment Strategy*
- *Community Forests: Needs & Resources for Creating & Managing Community Forests*



[www.northernforest.org/Community\\_Forest\\_Collaborative.html](http://www.northernforest.org/Community_Forest_Collaborative.html)



[www.tpl.org/our-work/land-and-water/community-forests](http://www.tpl.org/our-work/land-and-water/community-forests)