New Directions for Ontario's Forests

Ecological Forestry . . . A Cut Above

This is the sixth in a series of fact sheets examining the economic links between healthy forest ecosystems and the long-term viability of resource-dependent communities in Ontario. This fact sheet looks at the economic potential of ecologically sustainable forestry operations and considers some of the ways in which these operations can be encouraged.

Industrial forestry in Ontario today emphasizes short-term profits, high-volume tree cutting, low job-to-volume-cut ratios and intensive mechanization. This approach threatens to exhaust Ontario's natural resource base without providing long-term economic security for timber-dependent communities *(see Fact Sheets #1-5)*.

However, there are other options. Throughout northeastern North America, individuals and groups are exploring sustainable forestry alternatives that support local communities and, at the same time, maintain healthy forest ecosystems.

Woodlot Management

Forest farms of Quebec

Léonard Otis, a 72-year-old Quebec farmer, is a committed advocate of ecologically sustainable logging by woodlot owners. For 40 years, he has been "farming" his 700 acres of forested land on a sustainable basis.

Through trial-and-error, Otis has learned to work with natural processes in his mixed woodland which includes birch, poplar, sugar maple as well as conifers. Instead of liquidating his assets (i.e. intensively cutting his trees), Otis has concentrated on maintaining the natural capital of his forest so that its value increases over time.

Cutting about 400 cords per year, Otis makes a good living selling his wood to pulp, cardboard and saw mills. In just 40 years, his woodlot has achieved yields similar to the much-admired forests of Scandinavia and has increased the standing volume of quality wood. By harvesting his forest wisely, he has nurtured significant stands of sugar maple that are now capable of returning $200,000 per year in maple syrup production. By his calculations, there is enough long-term work in sustainable, multiple-use forestry on his farmstead to support 3 families very well.[1]

Community Forestry

The Menominee example

The Menominee forest in northeast Wisconsin — the first commercial forest in the United States to be officially certified as sustainably managed — demonstrates how these principles can be applied to benefit a larger community.

Similar to Ontario's Great Lakes-St. Lawrence forests, the 220,000 acres of productive Menominee forest lands are dominated by red and white pine and sugar maple. These reservation lands are owned and managed by the people of the Menominee Nation with the primary goals of promoting the health of the forest and sustaining the community.[2]

The Menominee are constantly searching for the best methods of management to maintain or improve forest health. Loggers receive mandatory training in low-impact cutting, and rules for careful logging are strictly enforced. According to government records, there were 1.5 billion board feet of useable timber growing on Menominee land when the reserve was first established in 1854. By 1988, 2 billion board feet of timber had been cut, yet the forest was calculated to contain at least the same amount of standing timber as in 1854.[2] This represents "a level of productivity unmatched by any other commercial U.S. forest."[3] The mill and woodlands operations are an economic mainstay of the Menominee community, employing close to 500 people on a full or part-time basis.[4]

These mixed-forest operations demonstrate that Ontario communities could potentially gain long-

continued next page

ILLUSTRATION BY CHARLES DREVER

Ecological Forestry
from page 1

term economic benefits from careful, ecologically oriented logging practices. It is possible that future work under boreal forest conditions will uncover similar benefits.

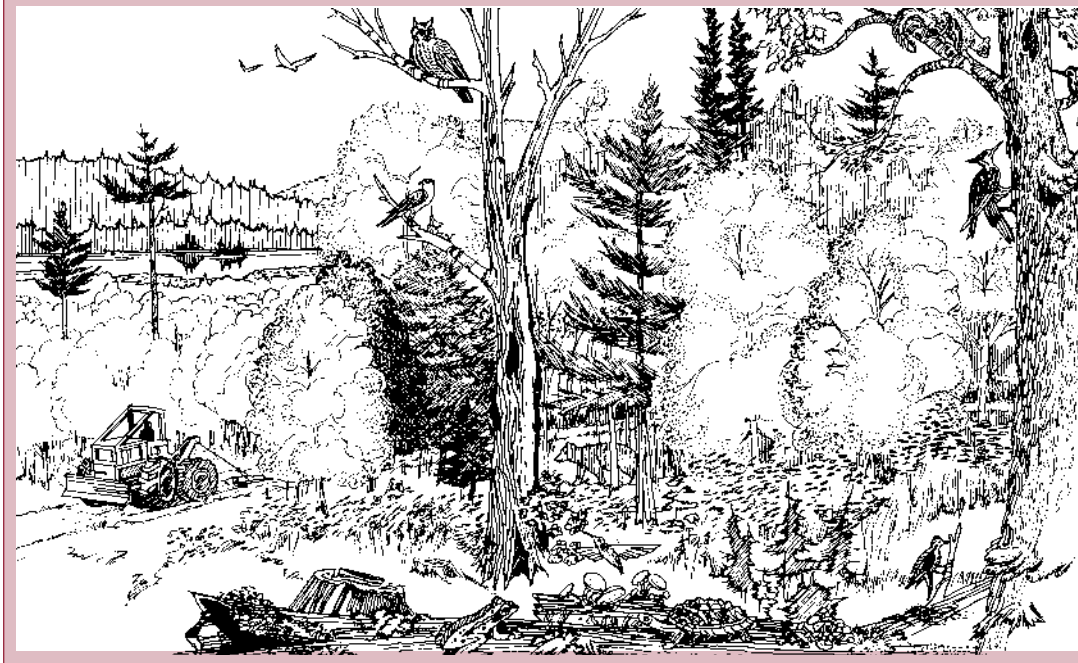
Sustainable Forestry
A foundation of economic diversity

Managing for forest health can provide a sustained income from timber harvesting over a long period of time. The forest will constantly be improved through stand tending and pruning. Comparatively few trees will be cut at any one time, with the best trees left as a seed source for the next forest generation. These approaches, with their need for individualized attention, have the potential to generate more jobs overall than does highly mechanized production.

Instead of short-term windfall profits, sustainable forestry offers local communities the promise of a secure foundation on which to build a stable, diversified economy.

The 50,000-acre Haliburton Forest of eastern Ontario is a case in point.† This private forest is carefully harvested to maintain and restore forest health. The annual logging of approximately 3 million board feet of timber provides employment for 20-25 people on a year-round basis. At the same time, for every dollar of net timber revenue, the Haliburton Forest generates $4 from recreational activities such as camping, outdoor education, hunting, snowmobiling and bird watching.[5]

ECOLOGICAL FORESTRY IN AN ONTARIO MI



- Few roads, small machinery, minimal damage to trees
- Individual trees harvested, leaving better trees and sections of old growth
- Mixture of tree species, ages and canopy heights
- Retention of many large live trees, standing dead trees and downed woody material
- Maintenance of wildlife diversity, especially sensitive interior wooldland, rare and uncommon species

GOOD

ILLUSTRATIONS BY CHARLES DREVER

Ecological Sustainability
How do we know?

Each of the logging operations discussed here — and many others, too — have obviously been undertaken with care and regard for the health of the forest's trees. However the jury is still out on whether they are, in fact, maintaining the health of the entire ecosystem. Tree growth is only one factor in a forest ecosystem; there are many other considerations such as soil structure and specialized wildlife habitat (see graphic above).

Ontario is still in its infancy in developing a process for officially recognizing ecological for-

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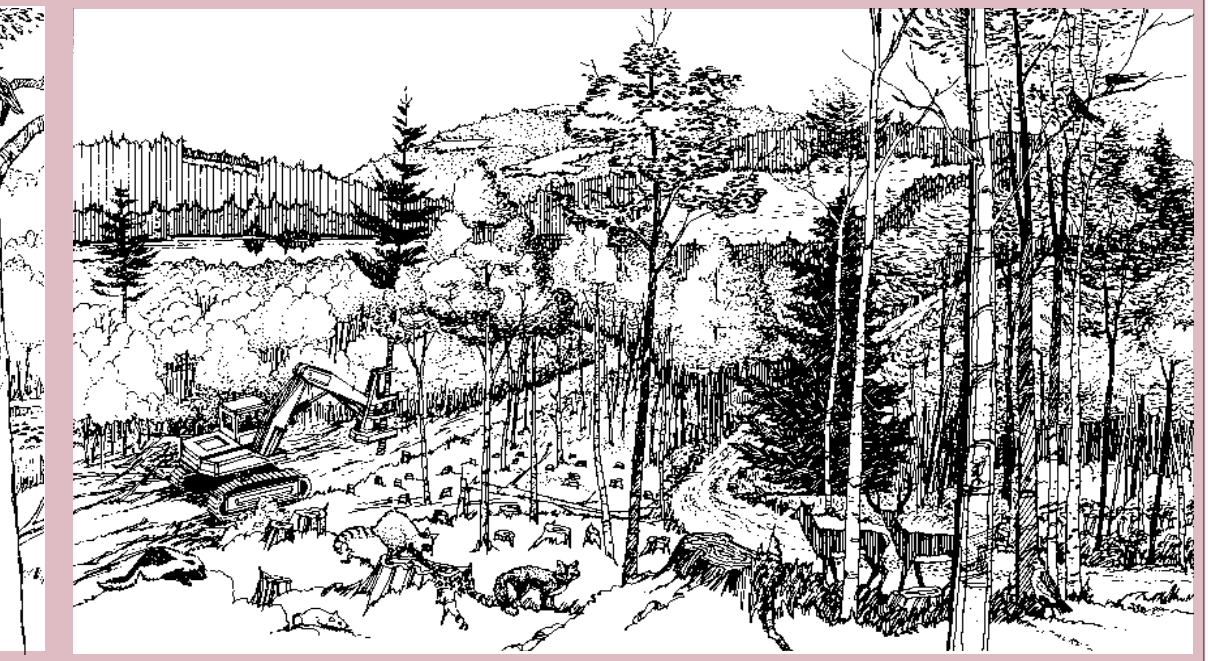
† Despite criticism by the Fair Tax Commission, high taxation rates on Ontario's private woodlots continue to exert pressure on the owner of Haliburton Forest to move away from sustainability. Only time will tell whether financial circumstances will force him to overcut his forest.

Complete references available upon request

IXED HARDWOOD FOREST — WHAT TO LOOK FOR



- Many poorly planned roads, large machines, damage to standing trees
- Many clearcuts, removal of best trees, conifers and old growth
- Limited range of tree species, leaving single or two-aged stands
- Removal of large live trees, standing dead trees and downed woody material
- Increase in wildlife species that thrive on disturbance (including exotic invasive species)

POOR

estry operations. This work is underway, however, driven by growing consumer demand for "eco"-labelled wood products. Once in place, such certification could provide sustainable forestry operations with financial support by ensuring premium prices for wood products and by helping to guarantee access to markets.

Ontario's Public Forests

Moving toward sustainability

On private land, owners are basically free to treat their woodlots any way they choose. In some cases, these forests are managed exceptionally well. But, in the interests of short term profits, private woodlands can just as easily be the site of profound devastation.

However, in Ontario, almost 90% of forest lands are in public — not private — hands;[6] and these lands currently feature few examples of truly sustainable forestry operations. What (in addition to the forestry certification process discussed above) could help public forests move toward greater ecological sustainability?

Many argue that one critical requirement is more local control over natural resources.[7] Communities often have a vested interest in the future of their neighbouring forests. Many local people "already possess the woods skills and knowledge and sense of place that make them natural participants in ecosystem-based management and monitoring".[8]

In Ontario's Temagami region, a coalition of citizen's groups recently proposed increased local control and responsibility over the area's natural resources through the establishment of a Temagami Forest Authority (TFA).

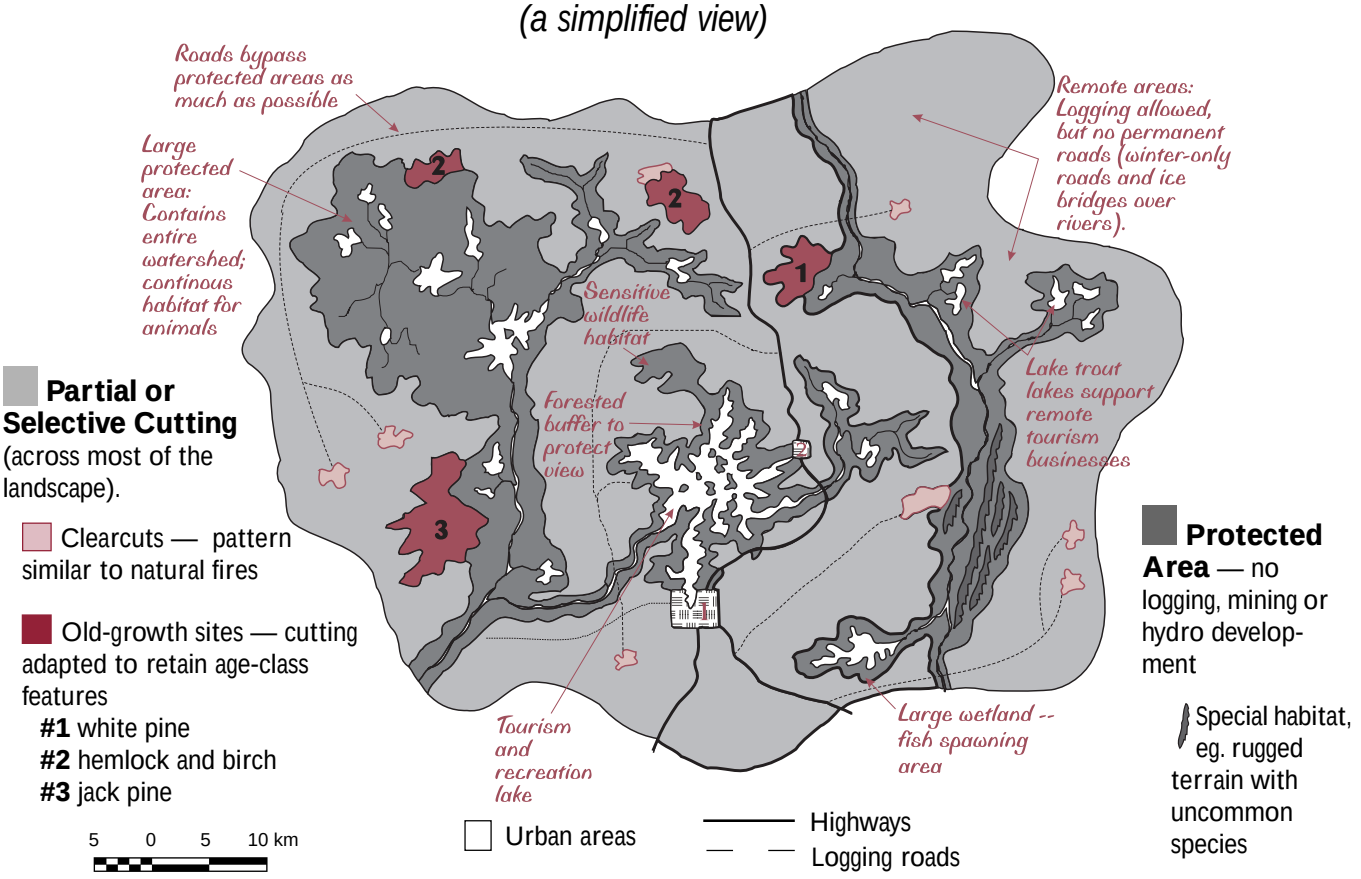
The TFA would control an ecologically-defined area large enough to provide for many different forest uses. It would have rights over all resource extraction on Crown (i.e. public) land in the area. Just as importantly, it would also have the rights to all revenues on Crown land from activities such as timber cutting fees, fishing licences, mineral exploration permits and park fees.

The proposal emphasized the need for mechanisms to ensure responsible forest management and continuing forest ecosystem health in order to safeguard the public interest. The TFA would not be directly controlled by government, but would have a Board of Directors with both elected and appointed members representing government, recreation, economy and environment. All land use activities would have to meet — or hopefully exceed — provincial standards. Several other mechanisms, such as land-use zoning reviews, were proposed as additional checks and balances.[9]

By generating and promoting these kinds of ideas, the citizens of Ontario can help design and forge a new future for the province's forests and communities — a future in which communities play a significant role in the stewardship of their forests; and a future in which ecological forestry is one component in a whole range of sustainable economic activities that utilize the forest without destroying the resource.

ECOLOGICALLY SUSTAINABLE FORESTRY ACROSS A LANDSCAPE:
WHAT IT MIGHT LOOK LIKE IN A GREAT LAKES-ST. LAWRENCE FOREST

(a simplified view)



Produced by the **Wildlands League** through its Forest Diversity ◆ Community Survival Project, this series seeks to promote constructive dialogue between resource-dependent communities and forest conservation advocates (*see Fact Sheet #1 for more details*). We hope the information will be useful in developing economically sound approaches to forest stewardship in Ontario that can help to ensure sustainable economies and sustainable communities. To date, topics in this series include:

- ***Ontario's Forest Industry:***
  #1 Where Have All the Loggers Gone?
  #2 Cutting the Future Out of Prosperity?
  #3 A New Appetite in the Forest
- ***The State of Ontario's Forests:***
  #4 Undercutting Our Natural Capital
  #5 Biodiversity at the Crossroads
- ***New Directions for Ontario's Forests***
  #6 Ecological Forestry ... A Cut Above

Upcoming:
The New Forest Economy: Who Will Pay?

Forest Diversity ◆ Community Survival is a project initiated by the **Wildlands League**, and financially supported by the Richard Ivey Foundation and Ontario Hydro. For more information, mail or fax this coupon.

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*The **Wildlands League**, an Ontario chapter of the Canadian Parks and Wilderness Society, has been working for more than 25 years to promote forest protection and sustainable forest management practices in the province.*

FACT SHEET # 6