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# Clearing the forest Cutting the rules



A report on clearcutting in Ontario

A report prepared by  
Sierra Legal Defence Fund  
and Earthroots

## Acknowledgements

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## EXECUTIVE SUMMARY

*Clearing the Forest, Cutting the Rules* is a joint publication of Earthroots and Sierra Legal Defence Fund. It highlights the problems associated with the proliferation of large clearcuts in Ontario's public forests. Clearcutting is the harvest method used in 88% of forest operations within the province and results in the removal of most, if not all, merchantable trees in a forest stand or group of stands in one operation.

After four years of province-wide public hearings before the Environmental Assessment (EA) Board, 115 conditions were issued to govern forestry in Ontario. These conditions, collectively called the Class Environmental Assessment for Timber Management (Timber Class EA) Decision, form the legally binding rules for forest management in Ontario, along with other legislation. Significant public concern, coupled with scientific uncertainty about the impact of large-scale clearcutting, led the EA Board to take a compromise position on the issue of clearcut size. The EA board ordered the Ministry of Natural Resources (MNR) to implement a 260 hectare size restriction on clearcuts (outlined as Condition 27), except in exceptional circumstances. The exceptions were to be justified by sound biological or silvicultural reasons.

Unfortunately, this binding restriction on large clearcuts in Ontario is being routinely ignored. This report examines 36 Forest Management Plans (FMPs), which were approved by the provincial government between 1998-2000 and which are being presently implemented. Large clearcuts were absent from only five plans. Clearcuts over 260 hectares in size represented an average of 52% of the area cut within the remaining 31 FMPs and totalled over 460,000 hectares of forest harvest. 597 clearcuts in the 36 FMPs examined exceeded the 260 hectare limit and eight FMPs were approved with between 25-76% of their number of cuts



over the 260 hectare limit. Some plans such as the ones for the Ogoki, Gordon Cosens, Iroquois Falls and Dog-River Matawin Forests had over 85% of their planned harvest area in cuts over 260 hectares. The largest individual clearcut uncovered in this study was a 10,257 hectare cut in the Gordon Cosens Forest.

The evidence gathered by Earthroots and Sierra Legal Defence Fund in *Clearing the Forest, Cutting the Rules* unmistakably shows that clearcuts over the 260 hectare maximum have been routinely approved by the MNR. Given that clearcuts over 260 hectares are supposed to be approved only in exceptional cases, the MNR's practice of making the exception the rule violates the EA Board's legally binding decision.

Scientific research suggests that clearcutting is a key factor contributing to the reduced range of the forest dwelling woodland caribou, a nationally threatened species. The marten, a member of weasel family, relies on large intact mature forests and has long been identified as a species that is negatively affected by logging. Recent research also suggests that clearcutting likely has negative effects on cavity nesting birds, such as the three-toed and black-backed woodpeckers, which utilize mature forests and recent burns. The effects of clearcutting on these animals are well documented. However, the effects of increasing the size of clearcuts are not well understood.

Forest fires of varying frequency and magnitude characterize Ontario's boreal forest. The most common rationale used (in 61% of cases) to justify large clearcuts in the approved FMPs is that they emulate the natural disturbance patterns left by fires. The MNR has entrenched this rationale into its new *Forest Management Guide for Natural Disturbance Pattern Emulation* (the "Guide"), which outlines how future landscape and stand level forestry should occur. The MNR does not acknowledge the difference between fire and clearcuts on the landscape and emphasizes in the title of the guide that its approach will emulate the "pattern" not the "ecological process" of natural disturbances. It has not yet been proven that the use of large clearcuts will achieve the continuation of healthy forests and promote the conservation of biodiversity.

The MNR admits that "most of the direction in this guide represents new and untested requirements" and concedes that there is a need for additional research to compare disturbances created by clearcuts to those created by fire. Despite the need for further research, this guide will be implemented in FMPs across Ontario in 2003. Given the experimental nature of such large clearcuts it seems neither prudent nor consistent with the precautionary principle to routinely authorize such large clearcuts before sufficient empirical data is available. In addition, the Guide contains a significant loophole that will allow the clearcut size restriction to continue to be routinely

ignored. The Guide defines exceptions based on the number of cuts (a frequency-based system) as opposed to the area being cut (an area-based system). FMPs can be easily manipulated to create the illusion that large clearcuts are rare (i.e. exceptions). For example, by making ten 25 hectare clearcuts near a 10,000 hectare clearcut, a frequency-based system would consider the large clearcut to be an exception (i.e. only 1 out

of 11 cuts), even though the vast majority of the area and trees being harvested would be in the exceptional clearcut. On the other hand, an area-based restriction would ensure that the purpose of the 260 hectare restriction is not frustrated. Using the same example, an area-based approach to determining exceptions would show that nearly 100% of the trees being harvested were

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"The provincial government has launched several 'grand experiments' that have the potential to improve environmental protection, but their failure carries significant risks."

"MNR's plan to have the forest industry cut down large swaths of forest to emulate forest fires carries the risk of worsening the impacts logging already has on biodiversity."

Gord Miller  
Environmental Commissioner of Ontario  
September 26, 2002

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in a clearcut area larger than 260 hectares (which could hardly be considered an exception, and therefore would not be permitted).

In April 2002, Earthroots and Sierra Legal Defence Fund used evidence from three Forest Management Plans (Gordon Cosens, Temagami and Wawa Forests) to form the basis of an *Environmental Bill of Rights* request for an investigation into alleged contraventions of Condition 27 of the Timber Class EA Decision. The Ministry of Environment (MOE) has agreed that there is enough evidence to conduct an investigation, which is now under way. It has indicated the investigation will be

completed by March 23, 2003.

Condition 27 and the other conditions that form the Timber Class EA Decision are currently under review by the MOE, with a decision on whether to renew or amend the existing conditions also expected in 2003. The MNR has already submitted its proposed changes to this regulatory document. Earthroots, Sierra Legal Defence Fund and other conservation organizations have examined this submission and have concluded that the MNR's proposed changes represent a grave step backwards for forestry in the province.

MNR's submission proposes to water down the Timber Class EA Decision. It seeks to replace the majority of the conditions with a system leaving forest management largely to the discretion of the MNR and the forestry industry. Very few clear, legally enforceable requirements would remain if the MOE accepts the MNR's proposal.

In particular, two proposed changes present serious concern:

- MNR wishes to replace the original wording of Condition 27 with a condition that would facilitate planning of large clearcuts. The MNR proposes to remove the 260 hectare maximum limit and the stipulation that larger clearcuts only be approved in exceptional circumstances (proposed Condition 39).
- MNR wishes to introduce a new condition (Condition 48) that could result in the creation of "timber targets" for forestry operations in Ontario. Such a target would make wood supply the number one concern for forest management, while pushing other values such as conservation, aboriginal and traditional use, and the protection of non-timber values to the side. Under such a system, the area to be cut could be determined by what the industry wants, not what the forest can sustain.



The MOE now has to decide whether to accept the MNR's timber-first approach or instead require Ontario's forestry system to shift to a more ecologically sustainable model. The long-term health of the province's forests is at stake.

## MAIN FINDINGS

- Between 1998-2000, the MNR approved ten forest management plans with over 70% of the area harvested in clearcuts over the 260 hectare limit.
- The most common rationale, used in 61% of cases (597 cases examined), to justify large cuts was that they emulate natural disturbance patterns such as those created by forest fires.
- The MNR has entrenched this rationale into its new *Forest Management Guide for Natural Disturbance Pattern Emulation* which will be implemented in all FMPs across Ontario in 2003.
- This guide has a frequency-based system (instead of an area-based system) where numerous small clearcuts can be intentionally created so that more large clearcuts are permissible (See example on Page 2). This loophole frustrates the purpose of the clearcut size restriction.
- Through an ongoing environmental assessment process, the MNR is currently attempting to replace the original wording of Condition 27 of the Timber Class EA Decision with new wording that would eliminate the existing restrictions on large clearcuts (proposed Condition 39).
- The MNR is also proposing to change the Timber Class EA Decision in several other respects. The most damaging proposed change involves a new condition (Condition 48) that could result in the creation of timber targets that would legally bind the MNR to guarantee wood supply to the forestry industry instead of managing supply based on what the forest itself can sustain.

## RECOMMENDATIONS

- The MNR must comply with the original Condition 27, which restricted clearcuts to 260 hectares, except in exceptional circumstances (for sound biological or silvicultural reasons). It should not continue to effectively make the exception the rule.
- The MNR must close the loophole in its new *Forest Management Guide for Natural Disturbance Pattern Emulation* by adding the following area restrictions: "No more than 20% (for each Forest Management Unit in the boreal region) and 10% (for each Forest Management Unit in the Great Lakes St-Lawrence region) of the planned harvest **area** may occur in clearcuts larger than 260 hectares."
- The Ministry of Environment must not approve MNR's proposed new condition (Condition 48) that could result in the creation of timber targets. This condition would be a giant step backwards for forestry in Ontario and threatens to override environmental considerations within forest management by prioritizing guaranteed levels of wood supply to industry over environmental concerns.
- **The MNR must make true ecosystem based planning a requirement of all forest management planning across Ontario. Wood supply must be the product of a forest management planning process that considers habitat requirements, aboriginal rights and concerns, non-timber forest values, protected areas requirements, long-term community needs, and environmental impacts. Timber products must be balanced against available non-timber alternatives.**

## INTRODUCTION

Clearcutting is the method of harvesting used in 88% of forestry operations in Ontario.<sup>1</sup> Clearcutting removes most or all merchantable trees in a forest stand or group of stands in one operation. Once an area of forest is clearcut, it may not grow back to the same type of forest and may not support the same types of species.

Ontario's forests are at a critical point. Twenty one species of flora and fauna living in the boreal forest are listed as species at risk.<sup>2</sup> Habitat loss is the primary threat to Canada's species at risk. Unroaded and intact forests are increasingly isolated and remote. Untouched old-growth forests are rare and disappearing at a faster rate than ever before. Non-timber forest users, logging companies, and First Nations communities are increasingly coming into conflict with each other over access to and protection of forests. Meanwhile, the incidents of large clearcuts in Ontario have increased despite current legal restrictions.

Ontario's forests are at risk as a result of increased downloading of forest management planning to the forestry industry, budget and staff cuts to the agencies meant to enforce forestry laws and a general failure to comply with the current standards.

Earthroots and Sierra Legal Defence Fund uncovered the expansion of large clearcuts in Ontario's public forests through the examination of 36 Forest Management Plans (FMPs) approved by the Ontario Ministry of Natural Resources (MNR). The data

*"...many credible audits and studies have suggested that clearcutting with inadequate regeneration efforts is the main cause of this species conversion [from softwoods to hardwoods] in Ontario's boreal forest. The ECO has seen no evidence that the ministry desires either to encourage or to curb this trend in boreal forest conversion. Indeed, the continued commitment to clearcutting large areas of the original forest seems to run a great risk that conversion will continue."*

**Environmental Commissioner of Ontario  
2001-2002 Annual Report**

collected from the FMPs form the basis of this document.

It must be remembered that almost 90% of the forestry taking place in Ontario occurs on publicly owned land. We believe that the MNR is flouting the rules by rubber stamping plans with numerous exceptions for large clearcuts (above the legally permitted maximum). The MNR must be held accountable.

Sierra Legal Defence Fund and Earthroots urge you to get involved in the debate over Ontario's forests. These forests are a legacy and as such, they must be managed and protected with the utmost diligence.<sup>3</sup>

<sup>1</sup> Based on harvest area per silvicultural system (clearcut, selection, shelterwood) for 1997-99 in MNR's Annual Report on Forest Management 1999/2000.

<sup>2</sup> Listed by the Committee on Status of Species at Risk in Ontario. Available publicly through a joint project of the Royal Ontario Museum and the Ministry of Natural Resources. <http://www.rom.on.ca/ontario/risk.php?region=3>.

<sup>3</sup> See [www.forestsfortomorrow.org](http://www.forestsfortomorrow.org) for the latest information on the ongoing government review of forestry rules.

## THE LAY OF THE LAND

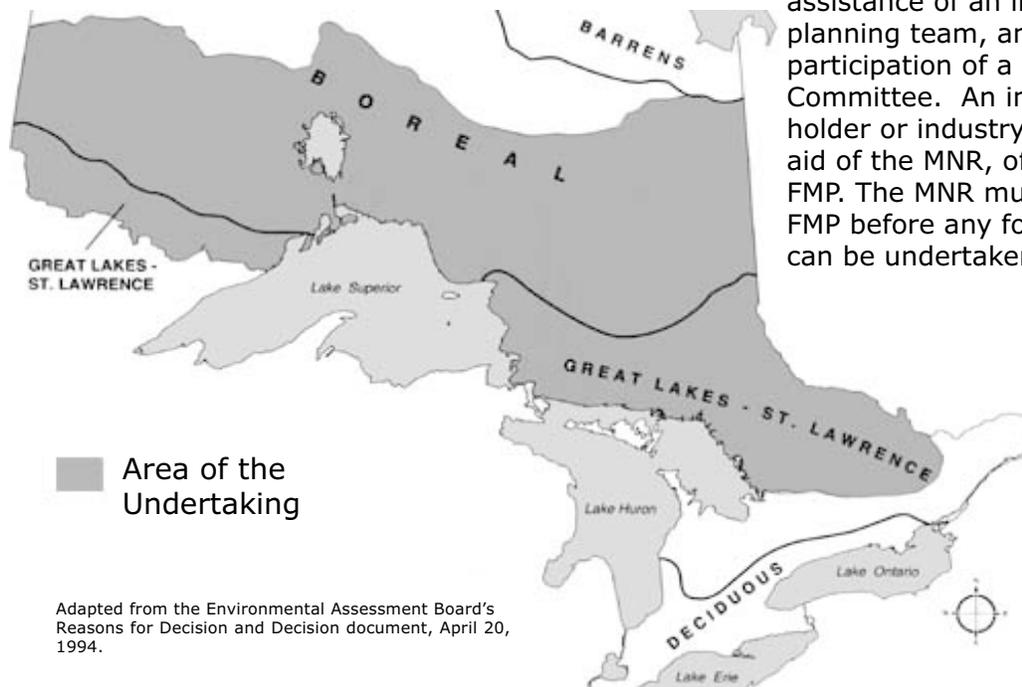
The MNR has a duty to manage forestry activities on behalf of the public. Crown land is public land held in trust for the benefit of all Ontarians, including First Nation communities who have Treaty and Aboriginal rights.

The province of Ontario is divided into two general zones. One, the so-called "area of the undertaking", is the landbase currently largely allocated to commercial forestry operations. The other, outside the area of the undertaking, comprises most of the urban and agricultural land and private forests in southern Ontario and the vast untouched northern boreal forests and lowlands of northern Ontario (see Map 1 below). The area of the undertaking covers an area of 38.5 million hectares and is divided into 53 Forest Management Units. Forest management planning in Ontario is ongoing with FMPs being prepared at different times in different units.



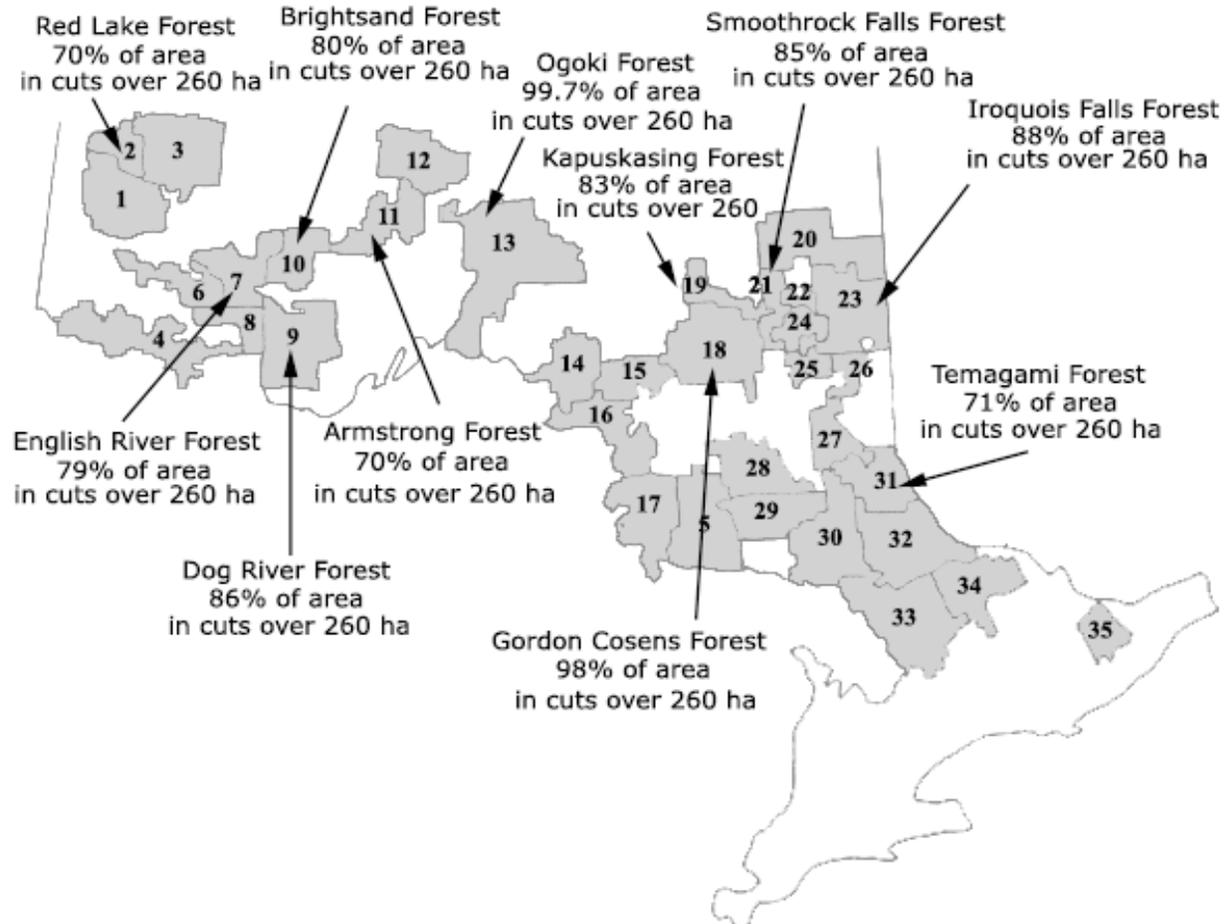
Each plan is supposed to adhere to the Class Environmental Assessment for Timber Management Class EA Decision and the *Crown Forest Sustainability Act's* Forest Management Planning Manual, which directs how planning is to be conducted, monitored, reported and evaluated. All FMPs have a 20 year perspective, and a 5 year plan of operations that outlines the harvest plan and methods, how harvested forests will be renewed, and what non-timber values are to be protected.

Map 1: The MNR's "Area of the Undertaking"



A registered professional forester prepares the plans, with the assistance of an interdisciplinary planning team, and with the participation of a Local Citizens Committee. An industrial license holder or industry group, with the aid of the MNR, often writes the FMP. The MNR must approve every FMP before any forest operations can be undertaken.

Map 2: **Forest Management Units examined for planned cuts over 260 hectares during the 5 year plan of operations.**



Map 2 (above) highlights Forest Management Units with the largest percentage of their total 5 year harvest in cuts over the 260 hectare maximum. This report examined 36 Forest Management Plans covering 35 Forest Management Units:

- |                                 |                           |                           |
|---------------------------------|---------------------------|---------------------------|
| 1. Whiskey Jack Forest          | 16. Wawa Forest           | 31. Temagami Forest       |
| 2. Red Lake Forest              | 17. Algoma Forest         | 32. Nipissing Forest      |
| 3. Trout Lake Forest            | 18. Gordon Cosens Forest  | 33. French-Severn Forest  |
| 4. Fort Frances-Flanders Forest | 19. Kapuskasing Forest    | 34. Algonquin Park Forest |
| 5. Northshore Forest            | 20. Moose River           | 35. Lanark (2 plans)      |
| 6. Wabigoon Forest              | 21. Smoothrock Falls      |                           |
| 7. English River Forest         | 22. Driftwood Forest      |                           |
| 8. Sapawe Forest                | 23. Iroquois Falls Forest |                           |
| 9. Dog River-Matawin Forest     | 24. Cochrane              |                           |
| 10. Brightsand Forest           | 25. Timmins               |                           |
| 11. Armstrong Forest            | 26. Watabeag              |                           |
| 12. Ogoki Forest                | 27. Elk Lake              |                           |
| 13. Kenogami Forest             | 28. Upper Spanish Forest  |                           |
| 14. White River Forest          | 29. Spanish River         |                           |
| 15. Magpie Forest               | 30. Sudbury Forest        |                           |

## THE RULES GOVERNING ONTARIO'S FORESTS

Two sets of legally binding rules govern forest management in Ontario. The rules are not perfect, but they do hold the MNR accountable to the public for forest operations on Crown Land. The Timber Class EA Decision and the *Crown Forest Sustainability Act* (CFSA) are the two principal laws governing forestry operations in Ontario.

### 1) The Timber Class Environmental Assessment

The Timber Class EA Decision is a binding order made under the *Environmental Assessment Act*. The decision was the culmination of four years of province-wide public hearings, which generated evidence numbering hundreds of thousands of pages. At stake was "the protection of forest resources valued and enjoyed by all Ontarians, the stability of northern Ontario communities and their economy, and the future of Ontario's forest industry."<sup>4</sup>

In 1994, the Environmental Assessment Board approved the MNR's undertaking of timber management planning. The approval was subject to a detailed set of 115 conditions. These conditions, in effect, created a binding regulatory work plan for the MNR. A nine year term was granted for the Timber Class EA to permit the monitoring of successes and failures of the timber management planning process. This approval expires in May 2003. At this point, the Minister of Environment will decide whether to extend or modify it.<sup>5</sup>

### The Clearcut Size Restriction - Timber Class EA Condition 27

One of the rules listed in the Timber Class

<sup>4</sup> *Class Environmental Assessment by the Ministry of Natural Resources for Timber Management on Crown Lands in Ontario*, Environmental Assessment Board's Reasons for Decision and Decision, Released April 20, 1994, at p. 2.

<sup>5</sup> At the writing of this report, this review process is already underway. Please refer to Appendix B and [www.forestsfortomorrow.org](http://www.forestsfortomorrow.org) for more information on this issue.

<sup>6</sup> *Class Environmental Assessment by the Ministry of Natural Resources for Timber Management on Crown Lands in Ontario*, Environmental Assessment Board's Reasons for Decision and Decision, Released April 20, 1994, at p. 169.

***MNR told us to ignore the public's opposition to large clearcuts. It said the opposition was uneducated and emotional and motivated by social and political pressure. MNR said our job was to explain to the public the necessity for large clearcuts. We disagree.***

**Environmental Assessment Board  
Reasons for Decision <sup>6</sup>**

EA Decision set a maximum size for clearcuts.

#### Condition 27:

"MNR shall implement a restriction on clearcut harvesting requiring a range of sizes of clearcuts not to exceed 260 hectares. MNR shall also develop standards for configuration and continuity of clearcuts, which will ensure that the purpose of this restriction is not frustrated.

(a) These restrictions and standards shall be incorporated into the Environmental Guidelines for Timber Management Activities specified in Condition 94(b).

(b) Silvicultural Ground Rules shall be prepared with the objective of ensuring that clearcuts are planned to a range of sizes and not consistently approach or meet the permitted maximum. Where for sound biological or silvicultural reasons individual or contiguous clearcuts exceed 260 hectares, they shall be recorded in the Plan as an exception to this condition, with reasons provided.

(c) MNR shall inventory and monitor clearcuts and exceptions to the maximum size restriction as well as configuration and contiguity. The results shall be in the Annual Report for the Forest Management Unit, in the Annual Report to the Legislature, in the five-year State of the Forest report and in the review for the Minister of Environment and Energy pursuant to Condition 114(a)(v)."



**In lay terms, Condition 27 of the Timber Class EA Decision limits clearcut size in Ontario to less than 260 hectares. Forest companies are allowed to exceed this legislated limit only in *exceptional* circumstances by providing sound biological or silvicultural reasoning.**

## 2) The Crown Forest Sustainability Act

In 1995, new forestry legislation entitled the *Crown Forest Sustainability Act* (CFSA) came into effect. The CFSA requires the Minister of Natural Resources to ensure that forests are managed in a way that sustains environmental values (fish, wildlife, water quality, etc.), economic values (timber, trapping, tourism, etc.) and social values (recreational, heritage, etc.). Under the CFSA, the Minister of Natural Resources is made ultimately responsible for the approval of five-year Forest Management Plans and the one-year work schedules that result from these plans. As well as following these plans, forestry companies must adhere to site-specific environmental-protection requirements outlined in various permits and approvals.

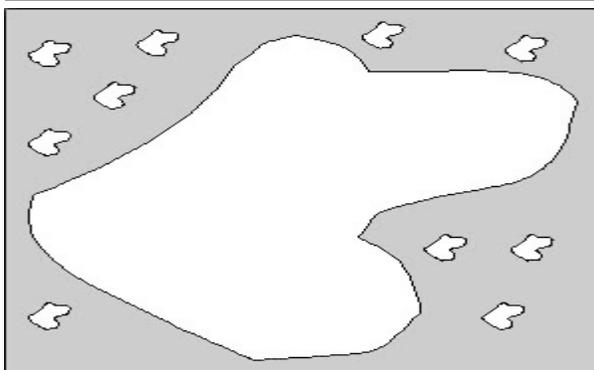
## THE ALLEGED VIOLATIONS

Earthroots and Sierra Legal Defence Fund believe that the MNR has failed to comply with Condition 27 of the Timber Class EA Decision, by failing to implement a restriction on clearcut size ranges. We also allege that the *Forest Management Guide for Natural Disturbance Pattern Emulation* violates Condition 27.

This Guide outlines a frequency-based system for determining the allowed percentage of large clearcuts within each Forest Management Plan (20% of the clearcuts in the Boreal Forest can exceed the 260 maximum and 10% for the Great Lakes-St. Lawrence Forest). Using a frequency-based system rather than an area-based system creates conditions where numerous small clearcuts can be intentionally created so that more large clearcuts are permissible. We believe that the creation of this loophole will frustrate the purpose of the 260 hectare size restriction set out in Condition 27, as illustrated by the example in Figure 1.

Figure 1 : Example of a **Frequency**-based Clearcut System

Clearcut Size	Number of Clearcuts
< 260 ha	10
> 260 ha	1
<b>Total Clearcuts</b>	<b>11</b>



***The percentage of clearcuts greater than 260 hectares is only 9% (based on frequency, that is, number of clearcuts).***

***On an area basis, however, the large clearcut represents most of the area being cut.***

The Guide was commented on by nearly 3000 Ontarians under the Environmental Bill of Rights public comment process. Only seven comments supported the MNR's proposed approach. Nonetheless, the MNR approved the guide.

Ontario's Crown forests are a public resource. Each Ontarian has a vested interest in the prudent management of this resource. The *Environmental Assessment Act* is designed to protect, preserve, and wisely manage Ontario's environment. Condition 27 was one of the conditions imposed by the EA Board after hearing from all interested parties in the four-year timber management hearing. A failure to respect Condition 27 constitutes a significant breach of the public interest.

## A HISTORY OF NON-COMPLIANCE

In a February 1998 case brought by the Wildlands League and Friends of Temagami against the MNR,<sup>7</sup> a panel of three judges from Ontario's Divisional Court found that the MNR broke seven rules made by the Environmental Assessment Board for the proper management of forests. The Court also decided that three Forest Management Plans approved by the MNR violated key sustainability provisions of the CFSA.

The Court concluded that the "litany of noncompliance" with the EA conditions was the result of "the institutional failure of the Ministry to appreciate and to fulfill its legal obligations". The Court called the violations "serious" and said that some of those violations "significantly deprive the public of the important procedures for direct public involvement in the forest management planning process" and deprive the public of proper accountability. The Court also said that violations of the conditions dealing with "pine marten and pileated woodpecker guidelines significantly reduce the protection of old growth forests" because the marten and woodpecker are important "indicator species", much like canaries are for the safety of coal miners. The Court also castigated the MNR, saying that it had ignored objective indicators of sustainability that were "at the heart of the new legal structure" of the CFSA. These objectives

*To put it nicely, the MNR is compliance challenged*

included forest diversity, landscape patterns, and habitat for animal life. In the end, the MNR was ordered to comply with the Environmental Assessment Board conditions and rewrite three forest management plans.

Did the Court's strong rebuke of the MNR make a lasting impression? It appears not. In the MNR's comments about the case in its June 17, 2002 review of the class EA,<sup>8</sup> it downplayed the matter, and focused on its action after the fact -- action it was ordered to take by the court after non-profit environmental groups, whose concerns had been studiously ignored by the MNR, started legal proceedings against it. Ultimately, the MNR was ordered to pay the costs for this expensive litigation at both the Divisional Court and Court of Appeal levels -- litigation that was necessary to force the government to obey its own laws.

Just one year earlier another Ontario Court<sup>9</sup> had convicted and fined the MNR \$1,200 for violating the EA Act by approving a road in Temagami without an environmental assessment.

<sup>7</sup> *Algonquin Wildlands League v. Ontario (Minister of Natural Resources)* (1998), 26 C.E.L.R. (N.S.) 163 (Ont. Div. Ct), affirmed in part by *Algonquin Wildlands League v. Ontario (Minister of Natural Resources)* (1999), 29 C.E.L.R. (N.S.) 29 (Ont.C.A.). Ontario's Court of Appeal reviewed the case and upheld the substantive portions of the lower Court's findings (declaring invalid three forest management plans). It overturned certain findings respecting the phase-in of provisions under the CFSA's Forest Management Planning Manual. The Court stated: "We agree with the Divisional Court's conclusion that the plans in question... clearly fell short of the sustainability standards required by the Act. In this regard, we have no reason to question the findings of the Divisional Court that the impugned plans failed to address issues such as Crown forest diversity objectives, landscape patterns, habitat for animal life and social and economic objectives, all of which were necessary to the requirements of s. 68(5) of the Act." With respect to the non-compliance with the EA conditions, the Court stated: "The Divisional Court found that the 1996 plans failed to comply with certain conditions... Although raised as a ground of appeal, in oral argument, counsel for the Minister did not press this issue. Bearing in mind the concession made on behalf of the Minister that compliance with these conditions does not pose a problem in rectifying the plans in issue and having regard to the fact that the Divisional Court did not rely upon the alleged breaches as a basis for declaring the impugned plans invalid, we see no need to resolve this issue."

<sup>8</sup> See: MNR, A Review by the Ministry of Natural Resources Regarding the Class Environmental Assessment for Timber Management on Crown Lands in Ontario, July 17, 2002, pp. 5-6. In attempting to cast a positive light on the MNR's behaviour, this self-serving document significantly understates the importance of the *Algonquin Wildlands League* case. The MNR document says: "The Ontario Divisional Court found that the phase-in provisions found in the Forest Management Planning Manual... were ultra vires the Act and thus invalid. Consequently, three of the forest management plans that had relied on the phase-in provisions of the FMP Manual were also found to be invalid... MNR appealed the Divisional Court decision to the Court of Appeal... MNR concentrated its appeal on whether the phase-in provisions of the FMP Manual were intra vires the Crown Forest Sustainability Act and thus valid... The Court of Appeal found that the phase-in provisions found in the FMP Manual were intra vires the Act, as sought by MNR." Curiously, the MNR document makes no mention of the fact that the Court of Appeal found that the three plans were invalid despite the legality of the phase-in provisions (see footnote 7 above). Nor did the MNR mention that the Court of Appeal imposed significant costs awards against the MNR at both the Divisional Court and Court of Appeal levels.

<sup>9</sup> *Ontario (Ministry of the Environment) v. Ontario (Ministry of Natural Resources)* (1997), 31 C.E.L.R. (N.S.) 137 (Ont. Court of Justice; Prov. Div.).

## METHODS & FINDINGS

The information presented in this report was obtained from 36 Forest Management Plans approved in 1998, 1999 and 2000 (See map on page 7). Nearly all of these plans are currently under operation. FMPs are made available for public viewing at the MNR Information Centre in Toronto and in the district where the plan was produced. It is a requirement of the law (Condition 27) that all exceptions to the 260 hectare rule are listed at the front of each FMP. The FMPs contain information on the total planned harvest and the number of clearcuts (either displayed graphically or in table format) within each Forest Management Unit. For a number of plans it was necessary to estimate the total number of planned clearcuts from graphs.

*Clearcuts over 260 hectares are supposed to be an exception. In large parts of northern Ontario, the **exception** has become the **rule**.*

Clearcut statistics for all 36 plans examined in this report can be found in appendix A.

Clear evidence is presented below (Tables 1 and 2) that the MNR has failed to implement the 260-hectare clearcut size restriction in many Forest Management Plans.

Table 1: Top 10 forest management plans with largest **area** in cuts over 260 hectares

Forest Management Plan	Managed by:	Percent of area harvested in clearcuts over 260 hectares
Ogoki Forest (A)	Buchanan Forest Products: Long Lake Forest Products Inc.	99.7%
Gordon Cosens (A)	Tembec Inc: Spruce Falls	97.6%
Iroquois Falls	Abitibi-Consolidated	87.7%
Dog River Matawin ^	Bowater Pulp and Paper Canada	86.0%
Smoothrock Falls *(A)	Tembec Inc.	84.9%
Kapusksing **	Tembec Inc.	83.1%
Brightsand Forest	Bowater Pulp and Paper Canada	80.4%
English River ^	Bowater Pulp and Paper Canada	78.8%
Temagami	Ministry of Natural Resources	71.2%
Armstrong	Domtar: EB Eddy Forest Products	70.1%

Table 2: Top 10 forest management plans with highest frequency of cuts over 260 hectares

Forest Management Plan	Managed by:	Frequency (number) of planned clearcuts over 260 hectares
Gordon Cosens (A)	Tembec Inc.: Spruce Falls	75.9%
Kapuskasing **	Tembec Inc.	39.3%
Ogoki Forest (A)	Buchanan Forest Products: Long Lake Forest Products Inc.	29.9%
Moose River (A)	Tembec Inc.	29.1%
Temagami	Ministry of Natural Resources	28.8%
Smoothrock Falls *	Tembec Inc.	28.1%
Red Lake (A)	Abitibi-Consolidated	25.5%
Wawa	Clergue Forest Management Inc.	25.4%
Magpie Forest	Buchanan Forest Products: Dubreuil Forest Products	23.6%
Iroquois Falls	Abitibi-Consolidated	23.1%

\* For Smoothrock Falls the total clearcut area over 260 hectares is 21020.7 ha, however only 14726.4 ha. of this is harvested (leaving residual patches). We used the latter number for our calculations.

\*\* Amalgamated into the Gordon Cosens Forest in 2000.

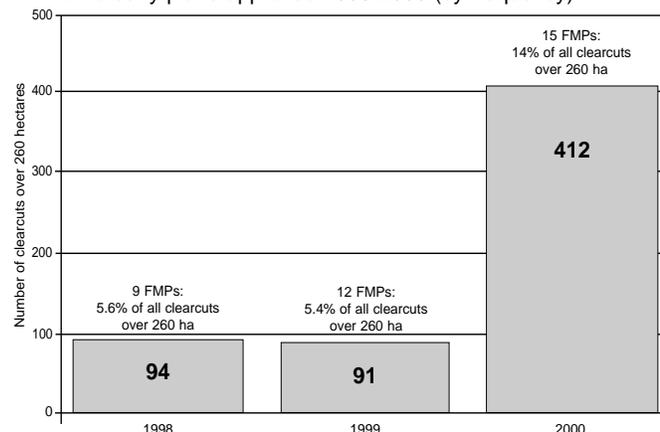
^ The number of clearcuts reported covered a 10 year period from 1995-2005 and therefore it was necessary to use a 10 year period for all data, rather than the usual 5 year period.

(A) Indicates that the number of cuts was estimated from a graph.

Large clearcuts over the maximum size limit were absent from only five plans. Clearcuts over the 260 hectare limit represented an average of 52% of the area cut within the remaining 31 FMPs. In the plans examined, a total of 597 clearcuts exceeded the 260 hectare limit, amounting to over 460,000 hectares of forest harvested.

There was a dramatic increase in the number of approved cuts over 260 hectares in forest management plans approved during 2000, compared with earlier years (see Figure 2). We do not

Figure 2: Number of clearcuts >260 hectares per year in forestry plans approved 1998-2000 (by frequency)



know why there are more large cuts, but we do know how the MNR and industry are attempting to justify them.

**In sum, the MNR's practice of routinely approving exceptions to the 260 hectare limit has effectively made the exception the rule. This is a violation of Condition 27 of the Timber Class EA Decision.**

## THE MOST COMMON RATIONALE FOR LARGE CLEARCUTS

The rationale used to justify 45% of large clearcuts in Ontario is that these cuts emulate the disturbance pattern left by a forest fire on the landscape. An additional 16% of clearcuts used fire emulation in combination with other reasons to justify exceeding the 260 hectare maximum. In total, 61% of all large clearcuts were rationalized because they allegedly mimic natural disturbances such as fire.

Forest fires can result in the disturbance of very large areas of forest. Using this rationale, large clearcuts in Ontario are designed to look like fires (leaving islands and peninsular patches of forest). In theory, this makes them more in tune with the pattern that nature creates. However, the MNR itself admits that fire emulation only mimics the pattern left behind by a fire. Large clearcuts do not mimic or re-create the ecological benefits to the forest that a fire produces.

The second most common rationale (16%) used to justify large clearcuts is that they will emulate natural disturbance and create future habitat for the marten. The marten is a member of the weasel family, whose optimum habitat is in mature coniferous and mixed wood forests that are 80 years old or older. The MNR believes that in 80 years

## **BIG EXCEPTIONS**

***Some of the largest individual clearcuts discovered in this study include the 10,257 hectare clearcut approved in the Gordon Cosens forest and the 10,073 hectare clearcut approved in the Dog River-Matawin Forest. These massive clearcuts amount to almost 40 times the 260 hectare size limit.***

time, the large clearcut will have become prime marten habitat.

The third most common rationale (10%) used to justify large clearcuts is that they will create good caribou habitat. The traditional network of smaller clearcuts are thought to be a key factor leading to the extirpation of woodland caribou (now listed as a nationally threatened species) from approximately 40% of their Ontario range. The MNR now wishes to conduct a massive experiment with large clearcuts to see if this new approach will prevent the population from experiencing further decline.

Caribou near roads have an increased risk of being killed by wolves or falling prey to hunters. Caribou have adapted to large fires in northwestern Ontario, and need vast areas of relatively mature, coniferous forest, and therefore a large clearcut (rather than a series of small ones), according to the MNR, may create good caribou habitat in 60 years. This rationale has not been scientifically tested. Although it sounds good on paper, what happens in the real world is very different. The MNR has adopted a wait-and-see policy with caribou management. Although large clearcuts may produce caribou habitat in the future, habitat needs of caribou should be considered in the present.

Contrary to the MNR's proposed approach, it can be argued quite easily that the best way to create habitat in the future for species such as caribou and marten is simply to protect current habitat already available on the landscape.

The fourth most common rationale (4.8%) used to justify large cuts is that they were surrounded by significant no cut areas and that the habitat needs of featured species were not jeopardized by a larger cut.

Salvage operations, where harvesting is planned because of poor forest health (for example after a spruce budworm outbreak), accounted for less than 1% of the rationale used for justifying large cuts.

## DISPELLING THE MYTH THAT CLEARCUTS CAN MIMIC FIRES

Many of the clearcuts exceeding the 260 hectare maximum are based on the faulty premise that clearcuts mimic fire. Clearcuts, a human-created physical disturbance, can not replace the natural processes of fire, a chemical disturbance.

Wildfire is the historical natural disturbance in the boreal forest. Fires regulate these ecosystems, renewing the forests and maintaining their health by killing pathogens and promoting regeneration. Unfortunately, to the forest industry fire is little more than a threat to wood supplies and has very little benefit in a human-managed landscape.

Logging is seen by many industrial foresters as a substitute for wildfire. Logging is actually a process vastly different from wildfire, producing very different results.

While there is a superficial similarity in that forest canopy may be reduced or removed, there are important functional differences between logged and burned sites. Such things as species composition, biomass accumulation, nutrient availability, retention of standing live and dead trees may be quite different on burned sites as compared to logged ones.<sup>10</sup>

Clearcutting can lead to stand conversion away from conifer (pine and spruce) dominated stands to those dominated by broad-leaved tree species (poplar and birch).<sup>11</sup> This conversion takes place because of the numerous changes in the nutrient regimes and cycling of the forest floor, major removal of seed trees, and changes in microclimatic conditions. In addition, clearcut logging does not provide the appropriate heat and chemical conditions for seed germination. Some conifer species with serotinous cones need heat to warm up and open cones to release seeds. Fire kills some if not all understory vegetation in a stand; this reduces competition for sunlight amongst seedlings and herbaceous plants. Mineral soil, essential for seed germination is exposed by fire as duff layers are burned. Conversion of stands leads to the loss of important wildlife species that rely on coniferous rather than broad-leaved tree species.

Fires will only occur under certain climatic and stand conditions. Weather plays the ultimate role in providing not only the necessary fuel moisture level (or dryness) but the ignition agent - lightning.<sup>12</sup> Clearcut sites have shown a marked failure in regeneration of white and red pine species.<sup>13,14</sup>

<sup>10</sup> Johnstone, M.H. and J.A. Elliot, 1996 Impacts of logging and wildfire on an upland black spruce community in northwestern Ontario. *Envir. Mon. & Assess.* 39: 283-297.

<sup>11</sup> Carleton, T.J. and P. Maclellan, 1994. Woody vegetation responses to fire versus clear-cutting logging: a comparative survey in the central Canadian boreal forest. *Ecoscience.* 1 (2): 141-152.

<sup>12</sup> Van Wagner, C.E., 1983. Fire behaviour in northern conifer forests and shrublands. pp. 65-80. In R.W. Wein and D.A. Maclean (eds.) *The Role of Fire in Northern Circumpolar Ecosystems.* John Wiley & Sons, Toronto, Canada.

<sup>13</sup> McRae, D.J., T.J. Lynham and R.J. Frech, 1994. Understorey prescribed burning in red pine and white pine. *For. Chron.* 70 (4): 305-401.

<sup>14</sup> Timoney, K.P., G. Peterson, and R. Wein, 1997. Vegetation development of boreal riparian plant communities after flooding, fire, and logging, Peace River, Canada. *For. Ecol. Mngt.* 93.

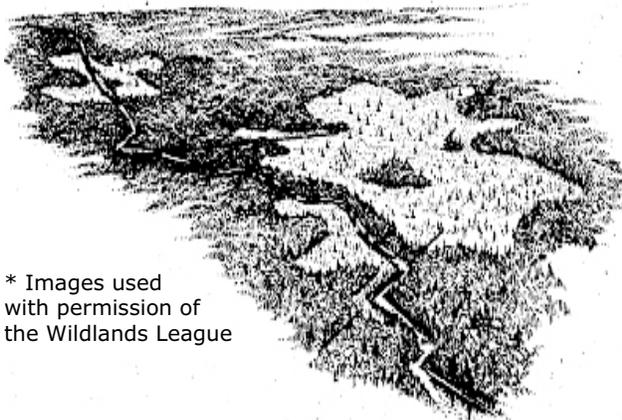
In heavily managed landscapes such as the boreal forest, it is nearly impossible to emulate natural fire disturbance given our current level of knowledge of forest dynamics.<sup>15</sup> Fire disturbance is essential to the successful health and regeneration of boreal forest ecosystems.

Some of the major differences between fires and clearcuts are illustrated below:

### Forest Fires

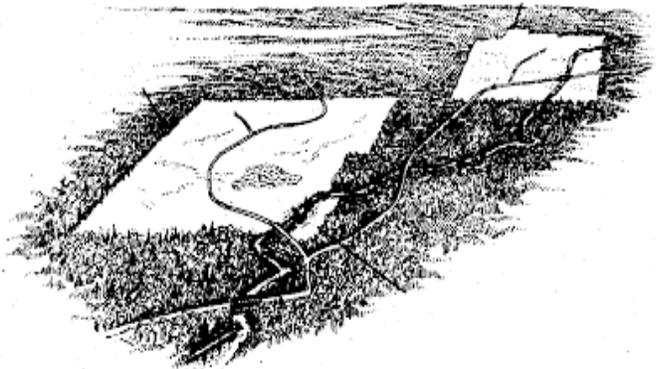
- *Kills pathogens (fungi & insects).*
- *Breaks rocks through heating and cooling which builds soil.*
- *Releases the nutrients from leaf litter.*
- *Allows individual trees and forest patches to survive, providing seed source, wildlife habitat and old-growth features.*
- *Leaves standing trees, fallen logs and a root network, reducing sediment runoff.*
- *Encourages conifer growth: heat from fire opens cones (to spread seeds) and reduces competition from hardwoods (poplar and birch).*
- *Retains genetic diversity of tree species.*
- *No new road construction.*

Figure 4: Forest fire site\*



\* Images used with permission of the Wildlands League

Figure 3: Clearcut site\*



### Clearcuts

- *No "clean-up" - allows pathogens to survive.*
- *Heavy equipment promotes rutting and compaction of soil.*
- *Depletes site by removing nutrient rich leaves, twigs, and wood.*
- *Completely removes standing trees, eliminates wildlife habitat, future seed sources and old-growth features.*
- *Allows high level of sediment runoff (erosion) due to the loss of soil-holding properties of trees.*
- *Promotes growth of shade-intolerant hardwoods by creating full sun conditions without heating soil. Conversion of spruce forests to poplar and birch forests.*
- *Reduces genetic diversity of regenerating forest.*
- *Road network must be built - allows increased access for hunting and mining opportunities, proliferation of invasive species, and compacts soil.*

Basing exceptions to the 260 hectare clearcut rule on the idea that clearcuts mimic the effects of fire is simply a "cover" to confuse the general public in Ontario. This scientifically unsound approach will likely contribute to the decline of the health of Ontario forest ecosystems.

<sup>15</sup> Lautenschlager, R.A and D. Voigt, 1998. Effects of forest regeneration practices on wildlife. In R.G. Wagner and S. J. Columbo (eds.) Regenerating Ontario's Forests. Fitzhenry & Whiteside, Markham, Canada. In Press.

## REPERCUSSIONS OF LARGE SCALE CLEARCUTTING

Clearcutting as a harvest method is thought to be a key factor in the reduced range of the forest dwelling woodland caribou, a nationally threatened species. Recent research also suggests that clearcutting likely has negative effects on cavity nesting birds, such as the three-toed and black-backed woodpeckers, that utilize mature forests and recent burns. The marten, a member of the weasel family also relies on mature forests and has long been identified as a species that is negatively affected by logging to a significant degree. The effects of clearcutting on these animals are well documented (see below). However, the effects of increasing the size of clearcuts are not well understood.

### Woodland Caribou

The impact of clearcutting on forest dwelling woodland caribou populations is a major environmental concern. Since the 1800s, woodland caribou populations have been declining across North America.<sup>16</sup> By the 1970s, woodland caribou had been eliminated from the eastern U.S. and most of eastern Canada.<sup>17</sup> In some areas, woodland caribou have been listed as "endangered" or "threatened". Boreal populations of woodland caribou are listed as threatened in Ontario, and seven other provinces.<sup>18</sup> The decline in woodland



caribou populations has been attributed to various factors including habitat modification by logging and increased mortality related to car collisions<sup>19</sup> and wolf kills.<sup>20</sup>

In Ontario and other provinces, the forestry industry is increasingly moving northward into prime woodland caribou habitat. New studies released in 1999, conducted through the University of Alberta, demonstrate that the integrity of woodland caribou habitat has been significantly impacted because the animals avoid roads, and other disturbances throughout their ranges.<sup>21</sup> Research also indicates caribou near linear corridors (roads, pipelines, seismic lines) were at higher risk of being killed by wolves, due to easier travel and access to caribou.<sup>22</sup>

Clearcutting in Ontario<sup>23</sup> and Newfoundland<sup>24</sup> has resulted in the displacement of woodland caribou from cut areas. Generally, where industrial forestry has occurred in Ontario, the caribou no longer exist. In Ontario, caribou formerly ranged as far south as Lake Nipissing and Minnesota<sup>25</sup>, but

<sup>16</sup> [http://www.modelforest.net/e/home/\\_show/\\_show1e.html](http://www.modelforest.net/e/home/_show/_show1e.html).

<sup>17</sup> Bergerud, A.T. 1978. Caribou. Pages 83-101 in Big game of North America: ecology and management. J.L. Schmidt and D.L. Gilbert, eds. Stackpole Books, Harrison, P.A.

<sup>18</sup> The Committee on the Status of Endangered Wildlife in Canada defines a species as "threatened" when a species is likely to become endangered if limiting factors are not reversed. Source: The Committee on the Status of Endangered Wildlife in Canada [http://www.ec.gc.ca/press/2001/010503-2\\_n\\_e.htm](http://www.ec.gc.ca/press/2001/010503-2_n_e.htm).

<sup>19</sup> U.S. Fish and Wildlife Service. 1985. Selkirk Mountain caribou management plan. U.S. Fish and Wildlife Service., Portland, OR.

<sup>20</sup> Bergerud, A.T. 1974. The role of the environment in the aggregation, movement and disturbance behaviour of caribou. In: Geist, V. and F. Wather (eds.) The Behaviour of Ungulates and Its Relation to Management. Vol. 2 pp.552-584.

<sup>21</sup> Simon J. Dyer, 1999. Movement and distribution of woodland caribou in response to industrial development in northeastern Alberta. University of Alberta Masters Thesis.

<sup>22</sup> Adam R. C. James, 1999. Effects of industrial development on the predator-prey relationship between wolves and caribou in northeastern Alberta. University of Alberta PhD Thesis.

<sup>23</sup> Darby, W.R. and L. S. Duquette. 1986. Woodland caribou in northern Ontario, Canada. Rangifer, special issue No. 1:87-93.

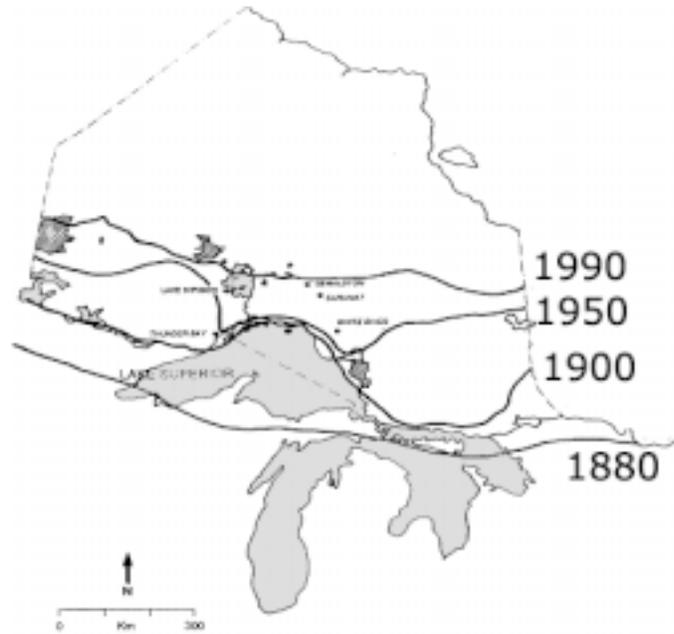
<sup>24</sup> Chubbs, T.E., Keith, L.B., Mahoney, S.P. and M.J. McGrath. 1993. Responses of woodland caribou (*Rangifer tarandus caribou*) to clearcutting in east-central Newfoundland. Canadian Journal of Zoology. 71:487-493.

<sup>25</sup> Darby, W.R., H.R. Timmermann, J.B. Snider, K.F. Abraham, R.A. Stefanski and C.A. Johnson. 1989. Woodland Caribou in Ontario. Background to a policy. Ontario Ministry of Natural Resources. Toronto. Ontario. p.38.

are now predominantly found north of 50°N latitude.<sup>26</sup> The current southern limit of the caribou range closely approximates the northern limit of timber operations in Ontario.<sup>27</sup> The best estimate is that forest-dwelling caribou are no longer present in approximately 40% of their former Ontario range.<sup>28</sup> The MNR admits that forestry has been responsible for changes in forest composition and structure, increased proliferation of access roads and the elimination of large contiguous patches of older forest that have likely contributed to the recession of the caribou range.<sup>29</sup>

Caribou are most common in large areas dominated by mature coniferous forest and open peatland complexes where deciduous browse and edge habitat are minimal. The choice of habitat spatially separates caribou from moose.<sup>30</sup> The caribou's major food sources are arboreal and terrestrial lichens typically associated with forest stands of at least 40 years. Stands 60 to 80 years old may have more lichen growth and additional characteristics that improve the habitat value for woodland caribou.<sup>31</sup> Timber harvesting is expected to change the distribution and abundance of moose and wolves, which may lead to increased predation rates on caribou.<sup>32</sup> Predation by wolves is an important limiting factor in most caribou populations and caribou densities are lowest where wolves and alternate prey (moose and deer) inhabit the same range.<sup>33</sup> In effect, in many areas of Ontario, the increase of moose populations due to logging has allowed wolf populations to increase. This in turn can increase pressure on caribou populations.

The MNR acknowledges that, "without



Map 3. **The retreat of woodland caribou in Ontario with the northward advance of industrial logging**<sup>34</sup>

careful and thoughtful planning, the cumulative effect of wildfire and forest harvesting in areas currently occupied by caribou could make large areas unsuitable as caribou habitat for long periods of time."<sup>35</sup>

The following is text from the MNR's *Forest Management Guidelines for Conservation of Woodland Caribou: A Landscape Approach* (Final Draft):

Plan a series of disturbance events (potential harvest areas) on the landscape following the *Forest Management Guidelines for the Emulation of Fire Patterns*<sup>36</sup> in such a manner as to  
i) maintain a current supply and

<sup>26</sup> Racey R., A. Harris, L. Gerrish, T. Armstrong, J. McNicol and J. Baker. 1999. Forest management guidelines for the conservation of woodland caribou: a landscape approach. MS draft. Ontario Ministry of Natural Resources, Thunder Bay, Ontario. p.69.

<sup>27</sup> Armstrong, T. 1998. Integration of woodland caribou habitat management and forest management in northern Ontario - current status and issues. Rangifer, Special Issue No. 10. p 221-230.

<sup>28</sup> Cumming, H.G. 1998. Status of woodland caribou in Ontario: 1996. Rangifer Special Issue 10:99-104 (page 20)

<sup>29</sup> Racey, Harris, and Gerrish et al, supra, at p. 12.

<sup>30</sup> James, supra.

<sup>31</sup> Shaefer, J.A. and W.O. Pruitt Jr. 1991. Fire and woodland caribou in southeastern Manitoba. Wildlife Monographs 116:1-39

<sup>32</sup> James, supra.

<sup>33</sup> Seip D.R. 1992. Factors limiting woodland caribou populations and their interrelationships with wolves and moose in southeastern British Columbia. Canadian Journal of Zoology. 70:1494-1503.

<sup>34</sup> Harris, Allan. 1999. Report of the status of Woodland Caribou in Ontario. Prepared for COSSARO. p.34.

<sup>35</sup> Racey, Harris, and Gerrish et al, supra, at p. 13.

ii) ensure a continuous supply of large areas (>10,000 ha) containing current winter and summer habitat, and iii) account for existing distribution of caribou, and alternate future habitat.

In lay terms, the *Forest Management Guidelines for Conservation of Woodland Caribou* rationalizes exceptionally large clearcuts (10,000 ha or more) for the purposes of ensuring a continuous supply of future areas of caribou habitat.

The caribou habitat management guidelines are intended to ensure the existence of suitable habitat, and maintain a predator-prey balance on the landscape similar to that which occurs in a natural system.<sup>37</sup> Caribou have adapted to large fire disturbances throughout northwestern Ontario.<sup>38</sup> The general theory is that since woodland caribou require vast areas of relatively mature, even-aged coniferous forest, adverse affects are more likely from numerous small clearcuts than a single large clearcut that regenerates as one age-class.<sup>39</sup> According to this theory, generally speaking, the more numerous the smaller clearcuts, the higher the road density and forest edge. It is further theorized that large clearcuts will minimize the 'edge effect', which is defined as a measurable change in the physical environment of the forest close to the edge, such that the amount of effective interior forest is reduced. For interior forest species, such as caribou, it is important to minimize both road density and forest edge.

"A recurring criticism of any proposal to manage caribou habitat is that this is in effect a "giant experiment" that has not been tested before, and the success of which will not be known for several decades."<sup>40</sup> Large clearcuts have an unknown effect on caribou populations and there is no guarantee that large clearcuts

***If the true intent of the new forestry guidelines is to provide suitable caribou habitat, it would be wiser to protect and conserve large intact areas of existing habitat than to cut large forested areas with the hope of creating future habitat in 60 years.***

will fulfill the habitat objectives of the *Forest Management Guidelines for Conservation of Woodland Caribou*. Therefore large clearcuts merely add another layer of risk to those that already exist.

Until their usefulness as a conservation tool is thoroughly tested, large clearcuts should be strictly limited. The overall goal of caribou management given the previous contraction of their range, should be to minimize human incursions into prime habitat.

<sup>36</sup> Also known as The Forest Management Guide for Natural Disturbance Pattern Emulation

<sup>37</sup> Armstrong, T., supra, at. pp. 221-229.

<sup>38</sup> Racey, Harris and Gerrish et al, supra, at p. 16.

<sup>39</sup> State of the forest report, Chapter 4 - EA Decision Appendix 22 Requirements. pp. 4-85.

<sup>40</sup> Armstrong, T., supra, at p. 228.

## Cavity nesting birds

A second environmental concern is related to the impact of clearcutting on cavity nesting bird populations. The retention of larger areas of continuous mature forest may be essential to maintain these species.<sup>41</sup> In Ontario, species of special concern are the black-backed woodpecker and three-toed woodpecker.<sup>42</sup> In addition, the pileated woodpecker, boreal owl, boreal chickadee and brown creeper have been listed as species that are likely to be sensitive to the long-term effects of forestry.<sup>43</sup>

Cavities are created from either dead standing trees (snags) or living trees with well developed heart rot or large dead limbs. While the *Forest Management Guide for Natural Disturbance Pattern Emulation* includes provisions for retaining snags or potential snags as nesting sites within cut blocks, the Guide does not come close to requiring the retention of the number of snags on site that would normally occur in an undisturbed forest.

Many bird species feed on insects that occupy recent burns. A study in Alaska found that black-backed woodpeckers fed primarily on charred portions of moderately to heavily burnt spruces and almost exclusively by excavating larval wood-boring beetles.<sup>44</sup> While the Guide requires some nesting sites in the form of snags, it cannot emulate the invasion of insect decomposers that follows fire.

Recent research has suggested that in "eastern Canada, three-toed and black-backed woodpeckers, mostly restricted to old-growth forests or recent burns, possess a combination of life-history traits that



conflict strongly with present forest management practices."<sup>45</sup> The negative impacts of clearcutting are more pronounced on cavity nesting birds restricted to mature forests and recent burns.<sup>46</sup>

<sup>41</sup> Imbeau, L., J.L. Savard and R. Gagnon. 1999. Comparing bird assemblages in successional black spruce stands originating from fire and logging. *Can. J. Zool.* 77: 1850-1860.

<sup>42</sup> Spytz, C.P. 1993. Cavity-nesting bird populations in cutover and mature boreal forest, northeastern Ontario. M.Sc. thesis, University of Waterloo, Waterloo, Ont.

<sup>43</sup> Imbeau, L., M. Monkkonen and A. Desrochers. 2001. Long-term effects of forestry on birds of the eastern Canadian boreal forests: a comparison with Fennoscandia. *Conservation Biology* 15(4): 1151-1162.

<sup>44</sup> Murphy, E.C. and W.A. Lehnhausen. 1998. Density and foraging ecology of woodpeckers following a stand-replacement fire. *Journal of Wildlife Management* 62(4): 1359-1372.

<sup>45</sup> Imbeau, Monkkonen and Desrochers, supra, at pp. 1151-1162.

<sup>46</sup> Imbeau, Savard, and Gagnon, supra, at. pp. 1850-1860.

## Marten

The marten has long been identified as a species that is highly and negatively affected by logging.<sup>47</sup> Logging operations often harvest old growth coniferous stands first, the very habitat used by marten. When boreal forests dominated by black spruce and jack pine undergo clearcutting and regenerate to aspen or aspen/birch/balsam fir forests, the result is poor habitat conditions for marten.<sup>48</sup>

The MNR's *Forest Management Guidelines for the Provision of Marten Habitat* states that, "the effects of clearcutting on marten habitat suitability and use are both immediate and long lasting."<sup>49</sup> Densities of marten in new clearcuts are very low and stay low for up to forty years.<sup>50</sup> Also, marten appear to avoid traveling through large expanses of open habitat and rarely venture more than 500 - 1000 meters from forested areas.<sup>51</sup>

The MNR also acknowledges that; "small populations of marten that are isolated from each other by large clearcut areas are at increased risk of local extinction."<sup>52</sup> The marten guidelines provide for the maintenance of 10-20% of the forest, which has the capacity to produce marten, in suitable conditions through the protection of some core areas of marten habitat. It seems clear however, that large clearcuts on the remaining 80-90% of the forest permitted through the marten guidelines will reduce marten populations in unprotected areas.



## ALTERNATIVES FOR FOREST PLANNING

For truly sustainable forestry to take place in Ontario's northern forests, a shift in the type of forestry taking place must occur. This new paradigm will mean that the products coming out of the forest are produced in a truly ecologically sustainable fashion and the short and long-term health of forest ecosystems is maintained. A main component of this new sustainability will be the maintenance and improvement of the health of wildlife populations living and interacting in these systems.

A new vision for forest management would include an ecosystem-based system of land use planning. This system fully involves First Nations peoples and communities, considers the habitat and life cycle needs of wildlife, and takes into account non-timber forest users' values and plans for future protected areas. This planning system includes protection for watershed and biodiversity values. The underlying foundation of this new system of planning is ecological sustainability.

<sup>47</sup> Marshall, W.H. 1951. Pine marten as a forest product. *Journal of Forestry* 49:899-905.

<sup>48</sup> Thompson, I. 1991. Could marten become the spotted owl of eastern Canada? *The Forestry Chronicle* 67(2):136-140.

<sup>49</sup> Robert, W., J.A.Watt, D.M. Baker, J.G. Hogg, and B.J. McNicol. *Forest Management Guidelines for the Provision of Marten Habitat*. Version 1.0. Ontario Ministry of Natural Resources. May 1996. Section 3.1.

<sup>50</sup> Robert, Watt, and Baker et al, supra, at Section 3.1. The guidelines quote research from: Thompson and Harestad 1994, Soutiere 1979, Stevenston and Major 1982, Snyder and Bissonette 1987.

<sup>51</sup> Robert, Watt, and Baker et al, supra at Section 3.5. The guidelines quote research from: Soutiere 1979, Stevenston and Major 1982, Snyder and Bissonette 1987

<sup>52</sup> Robert, Watt, and Baker et al, supra, at Section 3.5.

The forestry industry can fit into this new vision for the forests of Ontario. However, they must understand that they will no longer be the primary stakeholder. Under an ecosystem-based forestry system, the fibre and wood that the forestry industry removes from the forest is a product of a planning process that does not compromise the long-term ecological integrity of Ontario's forests. The area to be cut would always be an output of planning that includes all values: ecological, social and economic. Economic benefits of the forest are equitably shared amongst all forest users (timber and non-timber). The Ontario government would encourage and support value-added industries under this model of forestry. Commercial activity would shift from being a primary exporter of lumber to an exporter of finished products as well.

Operating systems under such a new forest planning system would retain the characteristics and functions of the uncut forest. Connectivity, forest age class and species type would be maintained, while road network density is decreased and the use of forest fire suppression is minimized. Timber extraction would only occur in areas that have been proven to be able to support this industry. High conservation value forests would be left intact.

Monitoring of the human imposed and nature caused changes to the forest are essential components of any new forest planning system. We realize that we will always have some impact on Ontario's forests, but by closely scrutinizing our present influence on these forests, we can improve our management tools and prescriptions. It is essential that the precautionary principle be a driving force for all forest management planning.

A new vision for forestry in Ontario is achievable. It will rest on the premise of



managing the forest for what it can sustain, not for what is demanded of it by industry. Indeed, the Ontario government has embraced some of the positive language of sustainability in the *Crown Forest Sustainability Act*. However, given the enabling nature of this legislation, it has not required the MNR to substantially improve its management of Ontario's forests. An alternative vision of forest planning would involve actually implementing the new emphasis on sustainability on the ground. It would move away from simply paying lip-service to ecological considerations, and instead move towards diligently ensuring that sustainability becomes the non-negotiable basis for all forest management. The people of Ontario should accept nothing less for their treasured public forests.

## CONCLUSION

The Ministry of Natural Resources and the forestry companies that operate in Ontario have a vision for forest management in the province. Based on the research conducted by Earthroots and Sierra Legal Defence Fund, that vision includes the flagrant use of large clearcuts and the application of untested rationales to justify these clearcuts. Furthermore, the MNR has chosen to simply ignore the wishes of the public who do not want to see Ontario's forests degraded by large clearcuts and whose interests MNR ultimately represents.

*Clearing the Forest, Cutting the Rules* unmistakably shows that Condition 27, which sets a maximum size for clearcuts (except in exceptional circumstances) in Ontario has been routinely violated. Earthroots and Sierra Legal Defence Fund also provide evidence showing that the approval of large clearcuts continues to increase. The 260 hectare maximum, set in 1994, after four years of province-wide public hearings, is being repeatedly violated even though the public continues to oppose large clearcuts.<sup>53</sup> Several forest management units in Ontario have over 70% of their planned harvest areas in clearcuts over 260 hectares. In others, the 260 hectare rule has been grossly exceeded. For example, in the Gordon Cosens forest near Kapuskasing, a 10,257 hectare clearcut (approximately the size of 17,000 football fields) is currently being cut. Creating large clearcuts for the purpose of emulating fire is a rationale that has not been scientifically proven or tested and contributes to what the Environmental Commissioner of Ontario has recently called a "grand experiment" on a provincial scale. These Forest Management Plans have been written by logging giants



Abitibi-Consolidated, Bowater, Buchanan, Domtar, and Tembec, who, with the help of the MNR seem determined to clearcut now and worry about the consequences later.

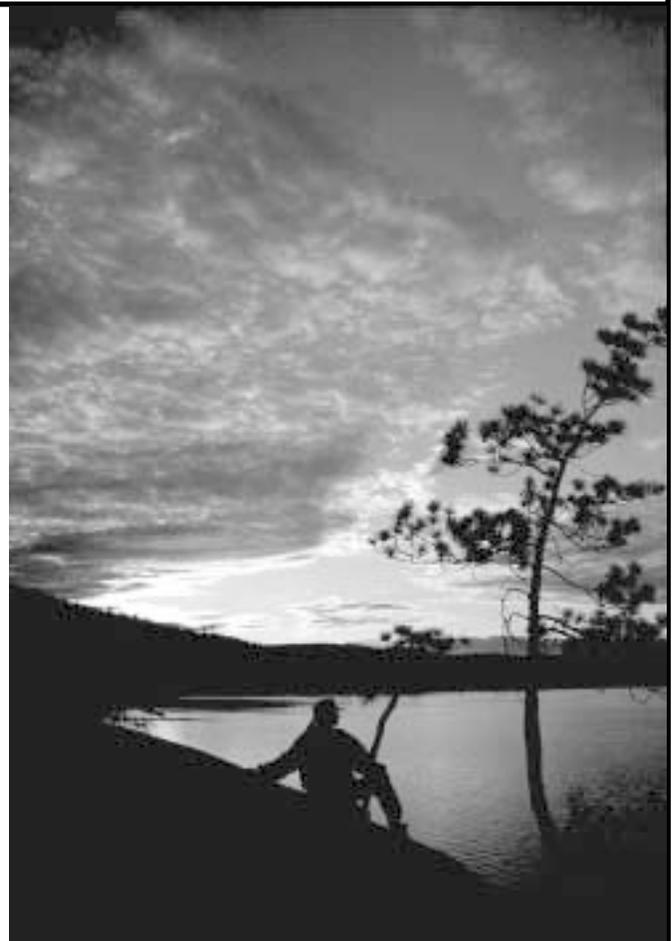
It is essential that the MNR not only enforce current legislation but withdraw its campaign to have existing regulations watered down. Ominously, the MNR has proposed weakening current forestry standards in the present review of the Timber Class EA Decision. The Ontario government must instead strengthen forestry laws.

The Ontario government has the opportunity to become a true leader in good forest management by shifting its current planning system to one that considers the whole ecosystem and all its needs and values. Ecosystem-based planning balances the values of non-timber forest users with those of the forest industry ensuring that all values and needs are considered when decisions about harvest size, layout and type are made. These needs and values include those of recreationalists, eco-tourism operators, First Nations peoples, the health of the natural world as well as the forestry industry.

<sup>53</sup> Polling shows that 81% of voting age Ontarians oppose clearcuts. From poll conducted by OraclePoll Research in September 2001. Question 1: Clear cutting is a type of logging operation where most of the trees are removed from a given area of forest. Would you say you strongly oppose, somewhat oppose, somewhat support or strongly support the logging practice of clear cutting forest areas? 81% of respondents opposed clearcutting. A total of 625 respondents 18 years of age and older were interviewed between September 9th and September 15th 2001. The margin of error for a survey of this nature is +/- 3.9%, 19/20 times. The poll was conducted for Earthroots, the Federation of Ontario Naturalists and the Wildlands League.

It is the recommendation of this report that:

- The MNR must comply with the original Condition 27, which restricted clearcuts to 260 hectares, except in exceptional circumstances (for sound biological or silvicultural reasons). It should not continue to effectively make the exception the rule.
- The MNR must close the loophole in its new *Forest Management Guide for Natural Disturbance Pattern Emulation* by adding the following area restrictions: "No more than 20% (for each Forest Management Unit in the boreal region) and 10% (for each Forest Management Unit in the Great Lakes St-Lawrence region) of the planned harvest **area** may occur in clearcuts larger than 260 hectares."
- The Ministry of Environment must not approve MNR's proposed new condition (Condition 48) that could result in the creation of timber targets. This condition would be a giant step backwards for forestry in Ontario and threatens to override environmental considerations within forest management by prioritizing guaranteed levels of wood supply to industry over environmental concerns.
- **The MNR must make true ecosystem based planning a requirement of all forest management planning across Ontario. Wood supply must be the product of a forest management planning process that considers habitat requirements, aboriginal rights and concerns, non-timber forest values, protected areas requirements, long-term community needs, and environmental impacts. Timber products must be balanced against available non-timber alternatives.**



The decisions made in Ontario's forests today will determine the legacy we leave for future generations. Our decisions on what to cut, how, and how much should be based on the best available science. The impact of large clearcuts on the forest and the species that live there is still unknown. Realizing that much is still unclear about Ontario's forests or the impact that our decisions have, we must proceed with caution. To not do so, would be irresponsible.

The Ministry of Natural Resources is playing the game of forestry without fully understanding all the rules of nature. It may not be possible to completely unravel these rules, but until we have a better understanding of the impact of large clearcuts, the grand experiment must be stopped.

## GLOSSARY

**Annual Allowable Cut (AAC):** The volume of wood that may be harvested, under management, for a given period (in this case annually). (From The State of the Forest Report, 2001)

**Arboreal:** Relating to a tree as in growing or dwelling on a tree.

**Area of the Undertaking (AOU):** The area within the geographic boundaries of the area of the undertaking is all the land and water within the Forest Management Unit boundary lines. The northern boundary is generally the limit of the current commercial forest on Crown Land. Of that area, 385,000 square kilometers (or 38.5 million hectares) is Crown land subject to the undertaking, and is referred to as the "Area of Undertaking" in Ontario's Timber Class Environmental Assessment. (From Timber Class EA Glossary)

**Age Class:** One of the intervals into which the age range of forest stands is divided for classification and use. For its inventory, the MNR uses age class groupings of barren and scattered, 1-20, 21-40, 41-60, 61-80, 101-120, 121+ years. (From Timber Class EA Glossary)

**Biomass:** 1. A quantitative estimate of the entire assemblage of living organisms, both animal and vegetable, of a given habitat, considered collectively and measured in terms of mass, volume, or energy in calories. 2. Biomass is plant material or vegetation that can be converted to useful fuel and that is considered as a potential energy source. (From AP Dictionary of Science and Technology <http://darwin.apnet.com/inscight/11061997/biomass1.htm>)

**Biodiversity:** The variability among living organisms from all sources and the ecological complexes of which they are a



part; this includes diversity within species and of ecosystems. (From Forest Management Guide for Natural Disturbance Pattern Emulation)

**Boreal forest:** A broad band of mixed coniferous and deciduous trees that stretches across northern North America, Europe and Asia. (From Timber Class EA Glossary)

**Clearcut:** The removal of most or all merchantable trees in a forest stand or group of stands in one operation. (From Forest Management Guide for Natural Disturbance Pattern Emulation)

**Conifers:** Needle-bearing trees that produce seeds in cones.

**Connectivity:** A qualitative term describing the degree to which late successional ecosystems are linked to one another to form an interconnected network. The degree of interconnectedness and the characteristics of the linkages vary in natural landscapes based on topography and natural disturbance regime. Breaking of these linkages results in forest fragmentation. (From Biodiversity Guidebook, Forest Practices Code of B.C. 1995 <http://www.for.gov.bc.ca/tasb/legsregs/fpc/fpcguide/biodiv/gloss.htm>)

**Crown Land:** Land in Ontario that is public land under the jurisdiction of the provincial government, including land under water.

**Duff layer:** The layer of partially and fully decomposed organic materials lying below the litter and immediately above the mineral soil. It corresponds to the fermentation and humus layers of the forest floor. When moss is present, the top of the duff is just below the green portion of the moss. (From Babine Forest Products Co. [www.babineefmpp.com/glossary/d.html](http://www.babineefmpp.com/glossary/d.html))

**Forest management Unit (FMU):** A forest area administered, controlled and operated under one management plan. (From Timber Class EA Glossary)

**Ecosystem:** A dynamic complex of plants, animals and microorganisms and their non-living environment interacting as a functional unit. The term ecosystem can describe small scale units, such as a drop of water, as well as large scale units, such as the biosphere. (From Forest Management Guide for Natural Disturbance Pattern Emulation)

**Ecological integrity:** An ecosystem has integrity when it is deemed characteristic for its natural region, including the composition and abundance of native species and biological communities, rates of change and supporting processes. (From Parks Canada Panel on the Ecological Integrity of Canada's National Parks)

**Edge Effects:** Environmental, biological and anthropogenic factors occurring within the ecotone between two habitat types. In a forested landscape, edge effects may extend from disturbed habitat into undisturbed habitat, making it less suitable for species adapted to interior forest conditions but more suitable for "edge loving" species. (From Forest Management Guide for Natural Disturbance Pattern Emulation)

**Even-aged:** Applies to stands or forests in which relatively small age differences exist between individual trees. The maximum difference in age is usually twenty years.

(From Timber Class EA Glossary)

**Endangered species:** A species facing imminent extirpation or extinction. (From Committee on the Status of Endangered Wildlife in Canada)

**Forestry:** A profession embracing the science, business, and art of creating, conserving, and managing forests and forest lands for the continuing use of their resources, material, or other forest products. (From Timber Class EA Glossary)

**Habitat:** The place or type of site where an organism or population naturally occurs. Species may require different habitats for different uses throughout their lifecycle. (From Forest Management Guide for Natural Disturbance Pattern Emulation)

**Harvesting/ Harvest:** Cutting and moving the trees, sometimes also including initial processing and extraction. (From Timber Class EA Glossary).

**Hectare:** An area of 10,000 square metres or 2.5 acres. (From Timber Class EA Glossary)

**High conservation value forests:** Forests containing globally, regionally or nationally significant concentrations of biodiversity values (e.g., endemism, endangered species, refugia). HCVFs may be forest areas that are in or contain rare, threatened or endangered ecosystems or provide basic services of nature in critical situations (e.g., watershed protection, erosion control). Large intact forested landscapes where most if not all naturally occurring species exist in natural patterns of abundance and distribution. HCFVs may be forest areas fundamental to meeting basic needs of local communities (e.g., subsistence, health) and/or critical to local communities' traditional cultural identity. (Modified from FSC-BC and FSC-US Appalachian standards. [http://www.fsccanada.org/pdf\\_document/](http://www.fsccanada.org/pdf_document/))

BC\_standards.pdf and <http://www.fscstandards.org/regions/app/principles/9.html>)

**Merchantable timber:** Refers to commercially valuable or saleable timber. (From Timber Class EA Glossary)

**Pesticide:** Any chemical or biological agent that kills, controls or modifies the behaviour of an unwanted plant or animal. Herbicides are used to kill weeds, shrubs or trees. Insecticides are used to kill insect pests. Pesticides may be applied before and/or after the harvesting of trees. (Modified from Timber Class EA Glossary)

**Precautionary Principle:** Environmental measures must anticipate, prevent and attack the causes of environmental degradation. Where there are threats of serious or irreversible damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation. (From Bergen Ministerial Declaration on Sustainable Development)

**Predation:** The hunting of an animal by another animal.

**Serotinous:** Referring to cones held closed by a resin bond, opening when exposed to heat from a wildfire or sometimes from direct sunlight on hot days. (From *Trees in Canada* by John Laird Farrar, 1995)

**Silviculture:** The science and art of cultivating forest crops. The theory and practice of controlling the establishment, composition, constitution, and growth of forests including harvesting, renewal and maintenance. (From Timber Class EA Glossary)

**Snag:** Standing or partially fallen dead trees that may serve as a source of food and/or habitat for wildlife. (From Timber Class EA Glossary)

**Soil compaction:** The compression of soil as a result of vehicle traffic, especially that of heavy equipment. Soil compaction can also result from vibration. Soil compaction can inhibit regeneration of vegetation. (From Timber Class EA Glossary)

**Slash:** Tree tops and branches left on a harvest site after merchantable logs have been hauled away. (From Timber Class EA Glossary)

**Stand:** A community of trees possessing sufficient uniformity in composition, constitution, age, arrangement, or condition to be distinguished from adjacent communities, so forming a silvicultural or management entity. (From Timber Class EA Glossary)

**Threatened species:** A species that is likely to become endangered if limiting factors are not reversed. (From Committee on the Status of Endangered Wildlife in Canada)

**Understory:** The vegetation growing below the canopy or overstory in a forest. The understory is often composed of herbaceous plants and shade tolerant species of trees. Shade intolerant species will grow in a relative open canopy forest.



clearing the forest  
cutting the rules

appendix a  
clearcutting statistics

a report on clearcutting by sierra legal defence fund and earthroots  
november 2002

## clearing the forest, cutting the rules

### APPENDIX A – CLEARCUTTING STATISTICS<sup>1</sup>

Occasional discrepancies were found within the forest management plans and what is actually occurring on the ground. Information available at the Natural Resources Information Center in Toronto is often not updated when changes to plans are made at District MNR offices. Every effort was made to resolve these discrepancies with the MNR. **Bold values indicate the highest value for this category.**

Forest Management Plan, District, Company and Year Approved <sup>2</sup>	Total Area Cut over period specified	Number of Clearcuts	Area in cuts over 260 hectares	Number of cuts over 260 hectares	Biggest Cut	Multiples of 260 for biggest cut	% Area in cuts over 260	% Number of cuts over 260
<b>Algoma Forest</b>	29,395 hectares	75	926 hectares	3	402 hectares	1.6 times	3.2	4.0
Sault Ste. Marie District Clergue Forest Management Inc. for the 20 year period from April 1, 2000 to March 31, 2020	from April 1, 2000 to March 31, 2005	from April 1, 2000 to March 31, 2005  (number of cuts estimated from graph)	from April 1, 2000 to March 31, 2005	from April 1, 2000 to March 31, 2005				

<sup>1</sup> In December 1999, the MNR produced an interim direction on clearcutting. This direction set out a new 'definition' for a clearcut, whereby proposed clearcuts (over the next 5 year plan) would incorporate adjacent disturbances less than 20 years old or less than 200 metres distant. In effect, when this new definition is applied, the size of clearcuts is magnified to include future cut area and past adjacent cut areas. The clearcut note was supposed to only be applied to Forest Management Plans approved in 2001 onwards though there is some indication that some 2000 plans might incorporate this new definition.

<sup>2</sup> All Forest Management Plans are approved by the Ministry of Natural Resources. All Forest Management Plans reviewed except for those for the Cochrane, Elk Lake, Temagami Forests are written by the forest industry. Some of these units have been subsequently amalgamated into larger units managed by the forest industry. As of April 2003, the Temagami Forest will be the only unit still managed directly by the Ministry of Natural Resources.

## clearing the forest, cutting the rules

Forest Management Plan, District, Company and Year Approved	Total Area Cut over period specified	Number of Clearcuts	Area in cuts over 260 hectares	Number of cuts over 260 hectares	Biggest Cut	Multiples of 260 for biggest cut	% Area in cuts over 260	% Number of cuts over 260
<b>Algonquin Park Forest</b>  Southcentral Region Algonquin Forest Authority for the 20 year period term from April 1, 2000 to March 31, 2020	N/A <sup>3</sup>	N/A	0	0	N/A	N/A		
<b>Armstrong Forest</b>  Thunder Bay District, Domtar Inc. for the 20 year period from April 1, 2000 to March 31, 2020	18,833 hectares  from April 1, 2000 to March 31, 2005	84  from April 1, 2000 to March 31, 2005	13,199 hectares  from April 1, 2000 to March 31, 2005	14  from April 1, 2000 to March 31, 2005	2589 hectares	10.0 times	70.1	16.7

<sup>3</sup> N/A – signifies forest management plan data for this column was not collected

## clearing the forest, cutting the rules

Forest Management Plan, District, Company and Year Approved	Total Area Cut over period specified	Number of Clearcuts	Area in cuts over 260 hectares	Number of cuts over 260 hectares	Biggest Cut	Multiples of 260 for biggest cut	% Area in cuts over 260	% Number of cuts over 260
<b>Brightsand Forest</b>  Thunder Bay District, Bowater Pulp and Paper Canada Inc. for the 20 year period from April 1, 1999 to March 31, 2019	12,964 hectares  from April 1, 1999 to March 31, 2004	243  from April 1, 1999 to March 31, 2004	10,421 hectares  from April 1, 1999 to March 31, 2004	8  from April 1, 1999 to March 31, 2004	2219 hectares	8.5 times	80.4	3.3
<b>Cochrane Forest<sup>4</sup></b>  Cochrane District, Ministry of Natural Resources for the 20 year period from April 1, 1998 to March 31, 2018	6,349 hectares  from April 1, 1998 to March 31, 2003	84  from April 1, 1998 to March 31, 2003 (number of cuts estimated from graph)	2,252 hectares  from April 1, 1998 to March 31, 2003	7  from April 1, 1998 to March 31, 2003	473 hectares	1.8 times	35.5	8.3

<sup>4</sup> The Cochrane Forest Management Unit has been amalgamated into the Moose River Forest Management Unit for 2003 onwards. This unit is now managed by Tembec Inc. A forest management plan for 2003-2008 is currently being finalized.

## clearing the forest, cutting the rules

Forest Management Plan, District, Company and Year Approved	Total Area Cut over period specified	Number of Clearcuts	Area in cuts over 260 hectares	Number of cuts over 260 hectares	Biggest Cut	Multiples of 260 for biggest cut	% Area in cuts over 260	% Number of cuts over 260
<p><b>Dog River-Matawin Forest</b></p> <p>Thunder Bay District, Bowater Pulp and Paper Canada Inc. for the 20 year period from April 1, 2000 to March 31, 2020</p>	<p><b>87,483 hectares</b></p> <p><b>from April 1, 1995 to March 31, 2005</b></p>	<p>503</p> <p>from April 1, 1995 to March 31, 2005</p>	<p><b>74,905 hectares</b></p> <p><b>from April 1, 1995 to March 31, 2005</b></p>	<p><b>70</b></p> <p><b>from April 1, 1995 to March 31, 2005</b></p>	<p>10,073 hectares</p>	<p>38.7 times</p>	<p>86.0</p>	<p>14.0</p>
<p><b>Driftwood Forest</b></p> <p>Cochrane District, Abitibi-Consolidated: Donohue Forest Products Inc. for the period April 1, 1998 to March 31, 2018</p>	<p>5,600 hectares</p> <p>from April 1, 1998 to March 31, 2003</p>	<p>45</p> <p>from April 1, 1998 to March 31, 2003 (number of cuts estimated from graph)</p>	<p>2,525 hectares</p> <p>from April 1, 1998 to March 31, 2003</p>	<p>5</p> <p>from April 1, 1998 to March 31, 2003</p>	<p>830 hectares</p>	<p>3.2 times</p>	<p>45.1</p>	<p>11.1</p>

## clearing the forest, cutting the rules

Forest Management Plan, District, Company and Year Approved	Total Area Cut over period specified	Number of Clearcuts	Area in cuts over 260 hectares	Number of cuts over 260 hectares	Biggest Cut	Multiples of 260 for biggest cut	% Area in cuts over 260	% Number of cuts over 260
<b>Elk Lake Forest<sup>5</sup></b>  Kirkland Lake District, Ministry of Natural Resources for the 20 year period from April 1, 1999 to March 31, 2019	6,348 hectares  from April 1, 1999 to March 31, 2001	66  from April 1, 1999 to March 31, 2001	455 hectares  from April 1, 1999 to March 31, 2001	1  from April 1, 1999 to March 31, 2001	455 hectares	1.8 times	7.2	1.5
<b>English River Forest</b>  Dryden District, Bowater Pulp and Paper Canada Inc. for the 20 year period from April 1, 2000 to March 31, 2020	73,945 hectares  from April 1, 1995 to March 31, 2005	289  from April 1, 1995 to March 31, 2005	58,270 hectares  from April 1, 1995 to March 31, 2005	49  from April 1, 1995 to March 31, 2005	815 hectares  (2000-2005)	3.1 times	78.8	17.0

<sup>5</sup> The Elk Lake Forest Management Unit was amalgamated into the Timiskaming Forest for the planning years 2001-2006. The new Timiskaming Forest Management Unit is managed by the Timiskaming Forest Alliance Inc., an industry group.

## clearing the forest, cutting the rules

Forest Management Plan, District, Company and Year Approved	Total Area Cut over period specified	Number of Clearcuts	Area in cuts over 260 hectares	Number of cuts over 260 hectares	Biggest Cut	Multiples of 260 for biggest cut	% Area in cuts over 260	% Number of cuts over 260
<b>Fort Frances-Flanders Forest<sup>6</sup></b> Fort Frances District, Abitibi-Consolidated for the 20 year period from April 1, 2000 to March 31, 2020	17,711 hectares  from April 1, 2000 to March 31, 2002	166	9,580 hectares  from April 1, 2000 to March 31, 2002	10	3454 hectares	13.3 times	54.1	6
<b>French-Severn Forest<sup>7</sup></b> Parry Sound District, Westwind Forest Stewardship for the period from April 1, 1999 to March 31, 2019	45,906 hectares  from April 1, 1999 to March 31, 2004	149	0	0	N/A	N/A		

<sup>6</sup> The Fort Frances – Flanders Forest Management Unit was amalgamated into the new Crossroute Forest in 2002. This unit is presently managed by Abitibi-Consolidated.

<sup>7</sup> Operations in the French-Severn Forest are presently Forest Stewardship Council certified.

## clearing the forest, cutting the rules

Forest Management Plan, District, Company and Year Approved	Total Area Cut over period specified	Number of Clearcuts	Area in cuts over 260 hectares	Number of cuts over 260 hectares	Biggest Cut	Multiples of 260 for biggest cut	% Area in cuts over 260	% Number of cuts over 260
<b>Gordon Cosens Forest</b>  Hearst District, Tembec Inc: Spruce Falls for the 20 year period from April 1, 2000 to March 31, 2020	69,035 hectares  from April 1, 2000 to March 31, 2005	54  from April 1, 2000 to March 31, 2005	67,351 hectares  from April 1, 2000 to March 31, 2005	41  from April 1, 2000 to March 31, 2005	<b>10,257 hectares</b>	<b>39.5</b> times	97.6	<b>75.9</b>
<b>Iroquois Falls Forest</b>  Cochrane District, Abitibi Consolidated Inc. for the 20 year period from April 1, 2000 to March 31, 2020	45,507 hectares  from April 1, 2000 to March 31, 2005	143  from April 1, 2000 to March 31, 2005	39,887 hectares  from April 1, 2000 to March 31, 2005	33  from April 1, 2000 to March 31, 2005	5956 hectares	22.9 times	87.7	23.1
<b>Kapuskasing Forest<sup>8</sup></b>  Hearst District, Tembec Inc: Spruce Falls for the 20 year period from April 1, 1999 to March 31, 2019	7,921 hectares  from April 1, 1999 to March 31, 2004	28  from April 1, 1999 to March 31, 2004	6,584 hectares  from April 1, 1999 to March 31, 2004	11  from April 1, 1999 to March 31, 2004	1951 hectares	7.5 times	83.1	39.3

<sup>8</sup> The Kapuskasing Forest Management Unit was amalgamated into the Gordon Cosens Forest Management Unit in 2000. This unit continues to be managed by Tembec Inc.

## clearing the forest, cutting the rules

Forest Management Plan, District, Company and Year Approved	Total Area Cut over period specified	Number of Clearcuts	Area in cuts over 260 hectares	Number of cuts over 260 hectares	Biggest Cut	Multiples of 260 for biggest cut	% Area in cuts over 260	% Number of cuts over 260
<b>Kenogami Forest</b>  Nipigon District, Kimberly Clark Inc. for the 20 year period from April 1, 2000 to March 31, 2020	66,690 hectares  from April 1, 2000 to March 31, 2005	610  from April 1, 2000 to March 31, 2005	20,671 hectares  from April 1, 2000 to March 31, 2005	55  from April 1, 2000 to March 31, 2005	1113 hectares	4.3 times	31.0	9.0
<b>Lanark Forest<sup>9</sup></b>  Kemptville District, Mazinaw-Lanark Forest Inc. for the period from April 1, 1999 to March 31, 2001	564 hectares	N/A	0	0	N/A	N/A		
<b>Lanark Forest<sup>9</sup></b>  Kemptville District, Mazinaw-Lanark Forest Inc. for the period from April 1, 1998 to March 31, 2018	309 hectares	4	0	0	N/A	N/A		

<sup>9</sup>The Lanark Forest Management Unit has been amalgamated into new Mazinaw-Lanark Forest Unit. This unit continues to be managed by Mazinaw-Lanark Forest Inc.

## clearing the forest, cutting the rules

Forest Management Plan, District, Company and Year Approved	Total Area Cut over period specified	Number of Clearcuts	Area in cuts over 260 hectares	Number of cuts over 260 hectares	Biggest Cut	Multiples of 260 for biggest cut	% Area in cuts over 260	% Number of cuts over 260
<p><b>Magpie Forest</b></p> <p>Wawa District, Buchanan: Dubreuil Forest Products for the 20 year period from April 1, 1999 to March 31, 2019</p>	14,088 hectares  from April 1, 1999 to March 31, 2004	72  from April 1, 1999 to March 31, 2004	8,135 hectares  from April 1, 1999 to March 31, 2004	17  from April 1, 1999 to March 31, 2004	1020 hectares	3.9 times	57.7	23.6
<p><b>Moose River Forest</b></p> <p>Cochrane District, Tembec Inc. for the period from April 1, 1998 to March 31, 2018</p>	18,910 hectares  from April 1, 1998 to March 31, 2003	79  from April 1, 1998 to March 31, 2003 (number of cuts estimated from graph)	12,751 hectares  from April 1, 1998 to March 31, 2003	23  from April 1, 1998 to March 31, 2003	2011 hectares	7.7 times	67.4	29.1
<p><b>Nipissing Forest</b></p> <p>North Bay District, Nipissing Forest Resource Management Inc. for the 20 year period from April 1, 1999 to March 31, 2019</p>	12,271 hectares  from April 1, 1999 to March 31, 2004	257  from April 1, 1999 to March 31, 2004	3,647 hectares  from April 1, 1999 to March 31, 2004	5  from April 1, 1999 to March 31, 2004	1196 hectares	4.6 times	29.7	1.9

## clearing the forest, cutting the rules

Forest Management Plan, District, Company and Year Approved	Total Area Cut over period specified	Number of Clearcuts	Area in cuts over 260 hectares	Number of cuts over 260 hectares	Biggest Cut	Multiples of 260 for biggest cut	% Area in cuts over 260	% Number of cuts over 260
<b>Northshore Forest<sup>10</sup></b>  Sault Ste. Marie and Sudbury Districts, Northshore Forest Inc. for the 20 year period from April 1, 2000 to March 31, 2020	24,487 hectares  from April 1, 2000 to March 31, 2005	252  from April 1, 2000 to March 31, 2005	8,312 hectares  from April 1, 2000 to March 31, 2005	21  from April 1, 2000 to March 31, 2005	753 hectares	2.9 times	33.9	8.3
<b>Ogoki Forest</b>  Nipigon District, Buchanan: Long Lake Forest Products Inc. for the 20 year period from April 1, 1998 to March 31, 2018	15,890 hectares  from April 1, 1998 to March 31, 2003	69  from April 1, 1998 to March 31, 2003 (number of cuts estimated from graph)	15,850 hectares  from April 1, 1998 to March 31, 2003	20  from April 1, 1998 to March 31, 2003	2,500 hectares	9.6 times	<b>99.7</b>	29.0

<sup>10</sup> Northshore Forest Inc is a consortium of companies including Domtar Inc., St Mary's, Midway Lumber and 21 smaller operators. Though Domtar has majority stake in the operation, decisions are made on a consensus basis at the board level. The Northshore Forest Management Unit is an amalgamation of the former Mississagi and Spanish River Forest Units.

## clearing the forest, cutting the rules

Forest Management Plan, District, Company and Year Approved	Total Area Cut over period specified	Number of Clearcuts	Area in cuts over 260 hectares	Number of cuts over 260 hectares	Biggest Cut	Multiples of 260 for biggest cut	% Area in cuts over 260	% Number of cuts over 260
<b>Red Lake Forest<sup>11</sup></b>  Red Lake District, Red Lake Forest Management Inc. for the 20 year period from April 1, 1998 to March 31, 2018	10,838 hectares  from April 1, 1998 to March 31, 2003	55  from April 1, 1998 to March 31, 2003 (number of cuts estimated from graph)	7,592 hectares  from April 1, 1998 to March 31, 2003	14  from April 1, 1998 to March 31, 2003	1363 hectares	5.2 times	70.0	25.5
<b>Sapawe Forest</b>  Fort Frances District, Buchanan: Atikokan Forest Products Ltd. for the 20 year period from April 1, 2000 to March 31, 2020	10,258 hectares  from April 1, 2000 to March 31, 2005	123  from April 1, 2000 to March 31, 2005	2,652 hectares  from April 1, 2000 to March 31, 2005	8  from April 1, 2000 to March 31, 2005	500 hectares	1.9 times	25.9	6.5

<sup>11</sup> The Red Lake Forest Management Unit is currently managed by a board. This board is presently directed by Weyerhaeuser, Abitibi-Consolidated and local operators who each retain 33% control.

## clearing the forest, cutting the rules

Forest Management Plan, District, Company and Year Approved	Total Area Cut over period specified	Number of Clearcuts	Area in cuts over 260 hectares	Number of cuts over 260 hectares	Biggest Cut	Multiples of 260 for biggest cut	% Area in cuts over 260	% Number of cuts over 260
<b>Smoothrock Falls Forest</b>  Cochrane District, Tembec Inc. for the 20 year period from April 1, 2000 to March 31, 2020	17,353 hectares  from April 1, 2000 to March 31, 2005	64  from April 1, 2000 to March 31, 2005 (number of cuts estimated from graph)	14,726 hectares  from April 1, 2000 to March 31, 2005	18  from April 1, 2000 to March 31, 2005	6228 hectares	24.0 times	84.9	28.1
<b>Spanish Forest<sup>12</sup></b>  Sudbury, Chapleau and Timmins Districts, Domtar Inc. for the 20 year period from April 1, 2000 to March 31, 2020	58,415 hectares  from April 1, 2000 to March 31, 2005	339  from April 1, 2000 to March 31, 2005	31,177 hectares  from April 1, 2000 to March 31, 2005	66  from April 1, 2000 to March 31, 2005	1582 hectares	6.1 times	53.4	19.5
<b>Sudbury Forest</b>  Sudbury District, Vermillion Forest Management Co. Ltd. for the 20 year period from April 1, 2000 to March 31, 2020	8,490 hectares  from April 1, 2000 to March 31, 2005	120  from April 1, 2000 to March 31, 2005	3,688 hectares  from April 1, 2000 to March 31, 2005	9  from April 1, 2000 to March 31, 2005	387 hectares	1.5 times	43.4	7.5

<sup>12</sup> The new Spanish Forest Management Unit is an amalgamation of the old Upper Spanish and Lower Spanish Forest Units.

## clearing the forest, cutting the rules

Forest Management Plan, District, Company and Year Approved	Total Area Cut over period specified	Number of Clearcuts	Area in cuts over 260 hectares	Number of cuts over 260 hectares	Biggest Cut	Multiples of 260 for biggest cut	% Area in cuts over 260	% Number of cuts over 260
<b>Temagami Forest<sup>13</sup></b>  North Bay District, Ministry of Natural Resources for the 20 year period from April 1, 1999 to March 31, 2019	15,605 hectares  from April 1, 1999 to March 31, 2004	66  from April 1, 1999 to March 31, 2004	11,115 hectares  from April 1, 1999 to March 31, 2004	19  from April 1, 1999 to March 31, 2004	1285 hectares	4.9 times	71.2	28.8
<b>Timmins Forest</b>  Timmins District, Abitibi-Consolidated for the 20 year period from April 1, 1998 to March 31, 2018	7,486 hectares  from April 1, 1998 to March 31, 2003	113  from April 1, 1998 to March 31, 2003	2,751 hectares  from April 1, 1998 to March 31, 2003	6  from April 1, 1998 to March 31, 2003	897 hectares	3.5 times	36.7	5.3
<b>Trout Lake Forest</b>  Red Lake District, Weyerhaeuser Canada Ltd. for the 20 year period from April 1, 1999 to March 31, 2019	36,201 hectares  from April 1, 1999 to March 31, 2004	397  from April 1, 1999 to March 31, 2004	9,671 hectares  from April 1, 1999 to March 31, 2004	21  from April 1, 1999 to March 31, 2004	1018 hectares	3.9 times	26.7	5.3

<sup>13</sup> The Temagami Forest Management Unit is the only unit in the province that is currently managed wholly by the Ministry of Natural Resources. The Town of Temagami and the Temagami First Nation have co-submitted a bid to the MNR for the Sustainable Forest License for this unit. The only other bidder is the Temiskaming Forest Alliance Inc., an industry group.

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Forest Management Plan, District, Company and Year Approved	Total Area Cut over period specified	Number of Clearcuts	Area in cuts over 260 hectares	Number of cuts over 260 hectares	Biggest Cut	Multiples of 260 for biggest cut	% Area in cuts over 260	% Number of cuts over 260
<p><b>Upper Spanish Forest<sup>14</sup></b></p> <p>Chapleau and Timmins Districts, Domtar Inc. for the 20 year period from April 1, 1999 to March 31, 2019</p>	6,720 hectares  from April 1, 1999 to March 31, 2004	53  from April 1, 1999 to March 31, 2004	1,894 hectares  from April 1, 1999 to March 31, 2004	6  from April 1, 1999 to March 31, 2004	390 hectares	1.5 times	28.2	11.3
<p><b>Wabigoon Forest</b></p> <p>Dryden District, Weyerhaeuser Canada Ltd. for the 20 year period from April 1, 1998 to March 31, 2018</p>	41,607 hectares  from April 1, 1998 to March 31, 2003	<b>966</b>  from April 1, 1998 to March 31, 2003	1,037 hectares  from April 1, 1998 to March 31, 2003	3	391 hectares	1.5 times	3.1	0.3

<sup>14</sup> The Upper Spanish Forest was amalgamated with the Lower Spanish Forest into the new Spanish Forest Management Unit in 2000.

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Forest Management Plan, District, Company and Year Approved	Total Area Cut over period specified	Number of Clearcuts	Area in cuts over 260 hectares	Number of cuts over 260 hectares	Biggest Cut	Multiples of 260 for biggest cut	% Area in cuts over 260	% Number of cuts over 260
<b>Watabeag Forest<sup>15</sup></b>  Kirkland Lake District, Timiskaming Forest Alliance Inc. for the 20 year period from April 1, 1999 to March 31, 2019	2,594 hectares  from April 1, 1999 to March 31, 2004	24  from April 1, 1999 to March 31, 2004	0	0	N/A <sup>16</sup>	N/A		
<b>Wawa Forest</b>  Wawa District, Clergue Forest Management Inc. for the 20 year period from April 1, 2000 to March 31, 2020	16,331 hectares  from April 1, 2000 to March 31, 2005	59  from April 1, 2000 to March 31, 2005	7,533 hectares  from April 1, 2000 to March 31, 2005	15  from April 1, 2000 to March 31, 2005	992 hectares	3.8 times	46.1	25.4

<sup>15</sup> The Watabeag Forest Management Unit was amalgamated with the Elk Lake Forest Management Unit into the new Temiskaming Forest Management Unit in 2001.

<sup>16</sup> N/A – signifies forest management plan data for this column was not collected

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Forest Management Plan, District, Company and Year Approved	Total Area Cut over period specified	Number of Clearcuts	Area in cuts over 260 hectares	Number of cuts over 260 hectares	Biggest Cut	Multiples of 260 for biggest cut	% Area in cuts over 260	% Number of cuts over 260
<b>Whiskey Jack Forest</b>  Kenora District, Abitibi-Consolidated for the period from April 1, 1999 to March 31, 2019	25,330 hectares  from April 1, 1999 to March 31, 2004	321  from April 1, 1999 to March 31, 2004 (cuts estimated from graph)	836 hectares  from April 1, 1999 to March 31, 2004	3  from April 1, 1999 to March 31, 2004	290 hectares	1.1 times	3.3	0.9
<b>White River Forest</b>  Wawa District, Domtar Inc. for the 20 year period from April 1, 1998 to March 31, 2018	23,773 hectares  from April 1, 1998 to March 31, 2003	189  from April 1, 1998 to March 31, 2003 (number of cuts estimated from graph)	16,238 hectares  from April 1, 1998 to March 31, 2003	16  from April 1, 1998 to March 31, 2003	5568 hectares	21.4 times	68.3	8.5



**appendix b**

**THE CLASS ENVIRONMENTAL ASSESSMENT DECISION FOR TIMBER MANAGEMENT IN ONTARIO: UNDER REVIEW AND THREATENED**

*Clearing the Forest, Cutting the Rules* has specifically highlighted the Ministry of Natural Resources' (MNR) failure to fulfill Condition 27 of the Timber Class EA Decision, which imposed the 260 hectare maximum on clearcut size. This appendix highlights some of the other conditions of the Timber Class EA Decision that the MNR has failed to respect. In addition, this appendix examines the ongoing review process for the Timber Class EA Decision, including some of the MNR's proposed changes to this legally binding document.

Some of the other conditions of the Timber Class EA Decision that the MNR has failed to respect are as follows:

- Condition 82 of the Timber Class EA Decision requires the MNR to produce annual reports on forest management in Ontario. However, for many years, the MNR did not produce annual reports – arguing that it was not required to produce them promptly on an annual basis. Indeed, the 1996/97, 1998/99 and 1999/00 reports were all produced between October 2000 and September 2001, long after the time they would have been useful to the public to assess the MNR's annual performance.
- Under condition 98, the MNR was obligated to develop a northern wetland evaluation system. While this system was developed it was never properly implemented because the Timber Class EA Decision did not specifically mention implementation. It seems logical though that once the system was developed the MNR should have acted on it by comprehensively evaluating and protecting wetlands.
- The MNR fell short of developing and implementing policies on roadless wilderness areas (condition 106) and old growth forests (condition 103)

Wherever the Timber Class EA Decision utilized vague language, the MNR chose to do the minimum it thought was required. Even where clear language was employed, the MNR sought to avoid its obligations until the court forced it to comply in a strongly worded decision.

The Timber Class EA Decision has a nine year shelf life. Last year the MNR began its review of the Timber Class EA Decision with the goal of renewing it in early 2003. On July 17, 2002, the MNR submitted its review of the Timber EA Decision to the Ministry

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of Environment<sup>1</sup> (MOE), and requested a renewal with significant changes to nearly all the conditions. The official public comment period expired on October 16, 2002.<sup>2</sup> The MOE has until early 2003 to accept or reject the MNR's proposed changes, or modify them accordingly.

The MNR is proposing numerous changes within its review, many of which are very worrying. A change of particular concern is the replacement of the original wording of Condition 27 with new language (proposed Condition 39) that opens the door to the expansion of large clearcuts.

### **MNR's proposed Condition 39:**

#### **Emulating Natural Disturbance Patterns**

For clearcut harvest operations, areas shall be planned for harvest in accordance with the most current direction and standards in MNR's approved implementation manual(s) or guide(s) relating to the emulation of natural disturbance patterns, as described in the Forest Operations and Silviculture Manual. Currently, that direction provides for a range of sizes of clearcuts, which generally shall not exceed 260 hectares. It also includes a standard that requires **80% of the number** of planned clearcuts in the Boreal Forest Region and **90% of the number** of planned clearcuts in the Great Lakes-St. Lawrence Region to be less than 260 hectares in size. In addition, that direction also included requirements for temporal and spatial separation requirements for planned clearcuts. (emphasis added)

The proposed Condition 39 only requires that clearcut size be determined by the latest information in the Forest Operations and Silviculture Manual. The MNR is thus attempting to remove the MOE's oversight role, which would allow the MNR itself to change the Manual with little or no public consultation, and therefore change the clearcut restrictions. Even if the Manual remains as is, it must be remembered that it only limits clearcut size on a *frequency* system (number of cuts) rather than on an *area* system, which is far more accurate and is not to subject to abuse.<sup>3</sup> Conservation groups are thus urging the MOE not to accept the MNR's proposal. If the existing clearcut restrictions are to be substantially changed, this should only be done on the basis of the latest available science and with the support of all key stakeholders.

The most troubling proposed change put forward by the MNR is the proposed Condition 48. Condition 48 could allow the MNR to establish a "timber target" to address a projected decline in wood supply. If approved by the MOE, and thus made binding under the *Environmental Assessment Act*, a timber target condition may allow the MNR to make wood supply the number one concern for forest management, while pushing all other forest values to the side. The MNR has proposed Condition 48 at the request of the forestry industry.

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<sup>1</sup> The MOE has jurisdiction over the *Environmental Assessment Act* under which the Timber Class Environmental Assessment was created.

<sup>2</sup> The MNR's proposal can be found online at: <http://www.timbera.mnr.gov.on.ca/publications.htm>

<sup>3</sup> As described on p. 10 of *Clearing the forest, Cutting the rules*.

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### **MNR's proposed condition 48:**

#### **Wood Supply Strategy**

(a) MNR, in consultation with the forest industry and other interested parties, shall develop a provincial wood supply strategy comprised of regional wood supply strategies. This strategy will include the following components:

- (i) an examination of past harvesting levels;
- (ii) a long term forecast for industrial wood supply, by species group;
- (iii) the forecast demand for industrial wood supply, by species group;
- (iv) an identification of anticipated wood supply issues; and
- (v) a description of strategies to address the identified wood supply issues.

(b) All strategies contemplated shall be consistent with the requirements of the *Crown Forest Sustainability Act* and, where applicable, will support the Ontario Forest Accord. The provincial strategy will be developed within one year of the extension and amendments of this EA Approval. MNR will seek the advice of the Provincial Forest Policy Committee in the development of the provincial strategy, and will provide an opportunity for public review and comment on the provincial strategy.

(c) Implementation of these strategies will be reported in the State of the Forest Report.

There is a concern that Condition 48 will bring in a "timber target". A "wood supply strategy", given that it refers to elements such as "forecast demand" and "strategies to address ... supply issues" leads to the conclusion that this process may be used to ensure a set wood supply for the industry. Conservation groups believe that wood supply should be determined by what the forest can sustain, not what the industry demands.

The MNR's proposal attempts to water down the regulatory language of the original Timber Class EA Decision, replacing most of the conditions with very few strict requirements for future work by the MNR. Any changes to the Timber Class EA Decision must include clear, legally enforceable requirements based on the perspective of sustaining the entire forest ecosystem. These requirements must outline how the public must be included in planning processes, how ecological values must be protected, what new forest policies and guidelines must be developed and implemented, what research must be conducted, and how forest management information is to be collected and reported. Loosely written rules lead to problems with interpretation and unmet expectations. Guidelines that leave too much discretion in the hands of the MNR or forestry industry pose a risk to the greater public interest in sustaining the forests of Ontario.

For more information about this issue and to view a copy of a joint submission by conservation organizations sent to the MOE please visit [www.forestsfortomorrow.org](http://www.forestsfortomorrow.org).



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