

Harvesting in the Boreal Forest

Clearcutting in the Boreal Forest

Boreal forests have, over thousands of years, adapted to large-scale natural events such as forest fires, pest infestations and wind storms which tend to disturb entire stands of trees at one time. Some boreal tree species such as jack pine and spruce actually require this kind of natural disturbance in order to regenerate and grow.

In Ontario's managed forests, clearcutting is done to emulate the way a forest fire or wind storm would affect the landscape. Because the effects of fires and wind events can range in size from very small to very large, harvest areas in managed forests also range in size.

Forests that have been clearcut are regenerated through planting, seeding and natural processes. The Ministry of Natural Resources requires the forest industry to reforest all areas that are harvested.

Clearcutting should not be confused with deforestation. Clearcuts only temporarily change the vegetation type of a forest; within five to 10 years a new highly productive forest will once again be growing. Deforestation describes areas that are deliberately removed from the growing forest landbase for uses such as roads, buildings and agriculture.

The ministry no longer allows the kind of clearcut activity that results in a harvest block entirely devoid of standing trees. Instead, some large live trees must remain within each harvest block along with standing dead trees, patches of uncut forest and woody debris which provide habitat for certain wildlife species. This will ensure that future forest conditions better reflect the diversity of stand sizes and trees found naturally in the forest.

Forest Practices and Clearcutting

Ontario's Environmental Assessment Board, after years of hearings, concluded that clearcutting is an acceptable (and in some cases preferred) practice, particularly for the boreal forest. The ministry is moving towards providing for future forest conditions which better reflect the diversity of stand sizes and trees found naturally in the forest. Ontario's boreal forests have for decades been successfully regenerated after clearcutting and these new forests are supporting boreal wildlife.

Forestry activities in Ontario take place on what is referred to as the Area of the Undertaking (AOU) – an area consisting of 38.5 million hectares of Crown land south of the 51 degrees north latitude. Approximately 50 per cent of Ontario's boreal forest is located north of the Area of the Undertaking.

Currently, at least 80 per cent of all harvested areas in the boreal forest must be in cut blocks less than 260 hectares. Larger clearcuts are allowed for sound biological or silvicultural reasons when the rationale for the approach is recorded and approved in forest management plans. In woodland caribou range, for example, it is better to consolidate the harvest in large, even-aged tracts that will regenerate into similarly large tracts of suitable caribou habitat in the future.



Natural. Valued. Protected.

Forest Practices And Clearcutting

By contrast, limiting clearcuts to small areas makes it impossible to regenerate the boreal forest to its natural pattern of large even-aged stands, which is essential habitat for woodland caribou. Habitat is also maintained by restricting harvest in certain critical areas.

As part of efforts to revise the provincial forest management guides, the ministry is developing a new landscape guide, which will provide further direction on harvest patterns. Current direction on clearcut size and spacing will be revisited during this process.

Harvest Trends

The AOU contains a mixture of productive and non-productive forests, parks, lakes and some private land. The total amount of Crown productive forest land where forest management activities may occur is estimated to be 26 million hectares in size.

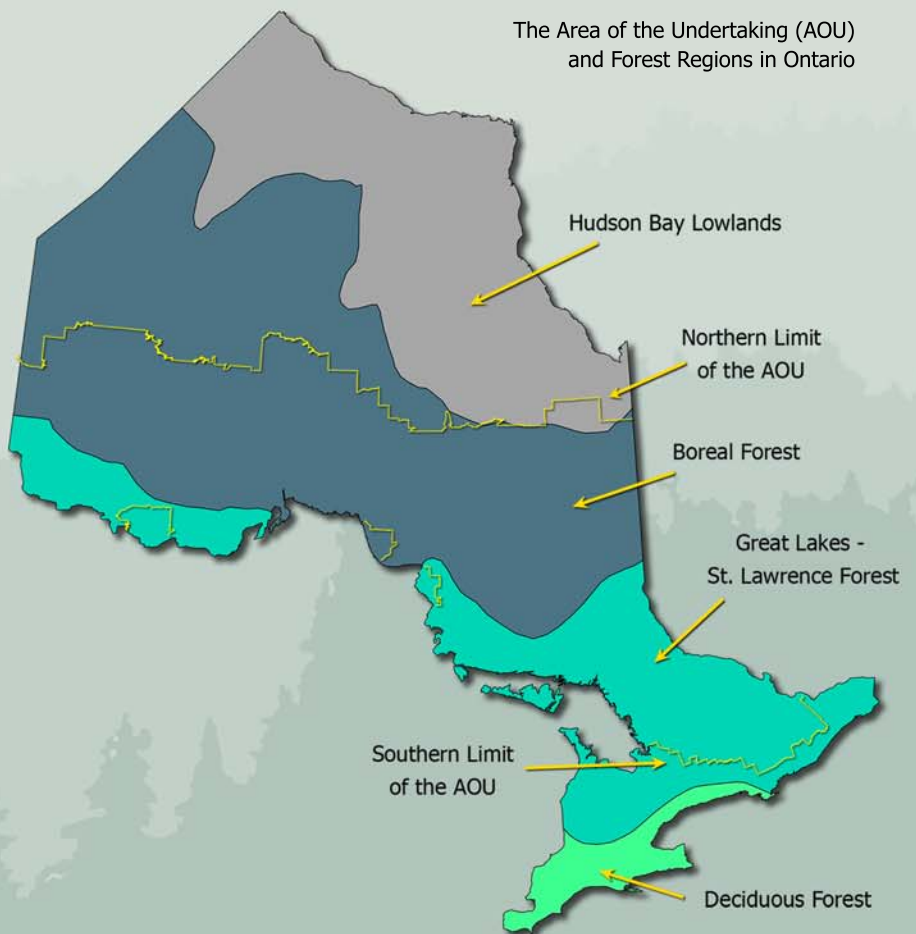
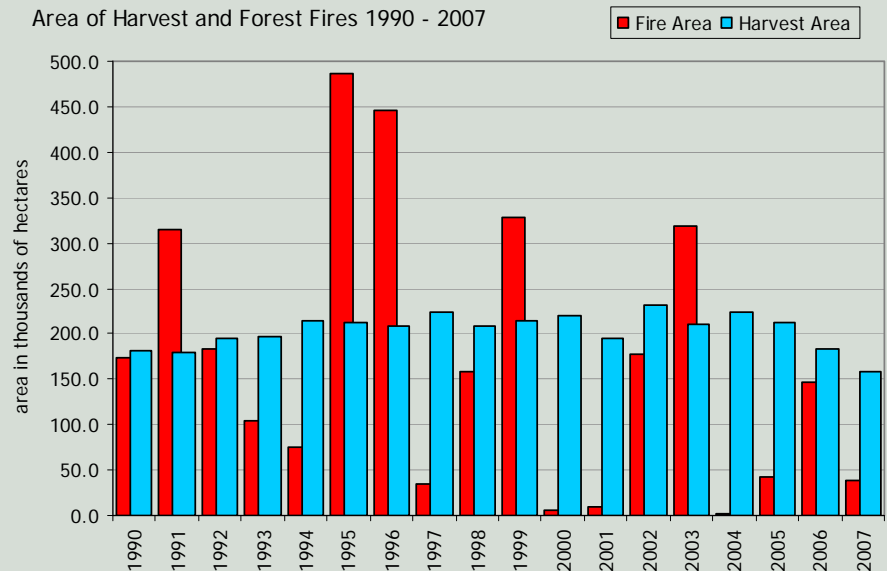
Within the boreal forest portion of the AOU, the managed forest is approximately 20 million hectares.

Timber harvesting occurs on less than one per cent of the forests within the AOU annually. From 1990 to 2005, approximately 210,000 hectares were harvested annually.

Each year, Ontario's forests are disturbed by wildfire and severe weather. In comparison, the area annually disturbed by natural causes such as fire and blowdown was 230,000 hectares.

Forest insects and diseases also affect more than 4.5 million hectares of forest per year. Mortality from insects and diseases is often different from mortality due to fire or weather damage. Insects and diseases tend to significantly reduce the growth rate of trees and kill individual or small groups of trees across the landscape, rather than most of the trees in a concentrated patch.

Area of Harvest and Forest Fires 1990 - 2007



Ontario is committed to sustainable forest management - healthy forests providing balanced environmental, social and economic benefits now and for the future.

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