

To the Editor:

I thought that reference to the more primitive conditions which prevail in the forest regions of Quebec might throw some light on the Henry George method of taxing forest property, which subject seems to be posing quite a problem among some of your contributors in recent months.

It shows how, through the application of the George principles timber production may be vastly increased, because it offers a profitable opportunity to labor and capital.

We will take the same area, and consider it under the present methods of ownership and taxation, and the more intensive methods which the George system would encourage. This area now consists of the following:-

	Acres	Cords of 85 cu. ft.
Mature, not growing	88,000	1,271,600
Young, merchantable	12,000	60,000
Totals	100,000	1,331,600

We will assume that this is a part of a much larger area, therefore this particular portion does not need to produce a steady annual amount for the owner. It is held under leasehold, renewable annually, and the owner must pay to government about \$2.10 per cord as he cuts the timber.

1. *Production by the current method* — clear-cutting everything merchantable, a nomadic operation, which returns to the area again only once in 80 years. The present stand, less losses

by fire and insects estimated at 131,600 cords, will be logged at 80,000 cords per year for 15 years, then left for 80 years.

Natural annual increment 15.3 cu. ft. per ac./yr.
Reduced by 20 per cent for fire and insect losses
12.24 cu. ft. per ac./yr.

Therefore the production in 80 years is
 $100,000 \times 12.24$
 $\frac{85}{80} \times 80 = 1,152,000$ cubic feet or 14,400 cords per year.

As this area is a part of a larger area, which altogether is providing a fairly constant annual production of pulpwood, the tax on the basis of Henry George's principles would be an annual payment of (14,400 cords x stumpage value in the tax year.) The annual tax must change with stumpage values. It is based on original "land," and what that land will produce without any special effort of man.

2. *Production after Henry George principles are applied.*

This has been figured out very carefully and is based on what the land can produce under good silvicultural practises which economically could be applied:-

Period of Logging	Cords per annum
First 25 years	54,000
Next 15 years	58,000
Next 15 years	62,600
Next 15 years	71,400
Next 15 years	76,900
In perpetuity thereafter	80,000

Note that the final production can be brought up to more than five times what is being obtained by current practices, on exactly the same area, and starting with the same volume.

Although the calculated cost is over 5 per cent higher by the more productive method, there are several reasons why an operating company might accept taxation on the Henry George principle. Such a user has a very expensive plant which depends entirely on a sure supply of pulpwood at a reasonable cost. Their labor conditions would be incomparably better with a permanent continuous operation on the same area. Far less area need be held, thus reducing the risk of fire loss. Through complete control no over-mature stands could accumulate, therefore insect losses would not occur at all. However, owing to permanent road system, timber killed by any agency would all be salvageable. There would be no danger of sudden "jumps" in the rates of royalty which governments now can impose. There would be a good chance that, once the system was well understood, the costs could be reduced at least down to the costs by the old method.

The application of Henry George principles to any forest, even quite a young one, depends on an estimate as closely as possible of what, without help from man, the area will grow; when it will be merchantable and the location of the area with respect to markets. Future incomes expected must be brought back, by discounting, to the present time. One would have to make estimates, from past records, of what percentage would survive if there were no fire protection; or, make a special allowance for the fire protection cost.

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[Mr. Gilmour has worked at forestry all his life and is still active in it. All of his jobs, in various parts of the world, have been for private companies, not governments. Though a Canadian and member of three forestry associations of Canada, he is also a member of the Society of American Foresters. Certain information in the above letter can be corroborated in *Stability as a Factor in Efficient Forest Management* by A. Koroleff et al, to which Mr. Gilmour also contributed.]