ALARMING DECREASE OF WOODLAND AREA IN AGRICULTURAL ONTARIO

Assessment Returns Show Over a 100% Decrease in Many Counties During the Past 33 Years

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THE comparison of the 1901 and 1934 assessment returns for the various counties show that a large acreage has been deforested during the past 33 years. Many of our thinking men and women are alarmed at the gradual decrease of the wooded areas in our best agricultural sections, as history gives examples of countries, which, on account of almost complete deforestation, are subject to floods and famine.

Is a sufficient area of woodland being preserved? All should give this question serious consideration, as the prosperity of future generations in Ontario is surely jeopardized by continued deforestation. To answer the question intelligently we should know approximately the percentage of land that should be forested to help insure optimum living conditions. This is answered by knowing the value of a woodlot to the individual farmer and the ameliorating effect of woodland on floods, stream control, springs and agricultural crops.

VALUE OF WOODLAND

1. Fuelwood and Lumber.

A well balanced farm should have sufficient acreage in woodland to supply its fuelwood and lumber requirements. Eight to fifteen acres is usually sufficient for this purpose. This fact is recognized generally as indicated by the higher selling price of the farm with a good woodlot.

2. Insurance.

A woodlot larger than 12 acres may be classed as insurance by the owner, as his annual fuelwood requirements do not equal the annual growth. This surplus may be drawn on when other crops have failed or money is urgently required for doctor bills, new machinery, stock or a payment on the farm.

3. Crop for Inferior Soils.

There is a large acreage of sandy, shallow and rocky soils which will not give adequate financial returns if cropped or pastured, but fine timber may be grown. This land, if deforested, is often a liability to the owner and a drag on the community.

4. Prevents Erosion and Sand Drifting.

Hillsides should be left wooded as they often erode badly and become valueless for cropping and pasture. Sand drifting is a menace that can be controlled by keeping these sandy areas forested.

5. Windbreaks.

Woodland has a beneficial effect on adjacent agricultural crops, protecting them from the winter winds that blow the protecting snow from the wheat and clover, and from the drying winds of summer. A woodlot is a very effective windbreak for the farm buildings.

6. Flood Control and Reservoirs.

Forests are reservoirs that hold back the surface run-off in all seasons of the year. This feature helps to prevent floods and to maintain a steady supply of water for wells, springs and streams. The Grand river in Western Ontario and many other streams are subject to flood in winter and spring. Men that were familiar with these streams 50 years ago tell us that they were not subject to floods at that time, and they attribute the floods in recent years to the decreased acreage of woodland and the excessive drainage of swamps.

7. Labour in winter.

Fuelwood and timber cutting provide work in the winter months for farm labourers and others who would otherwise be idle.

8. Beautification.

A countryside is far more beautiful if there are tracts of woodland scattered throughout.

PERCENTAGE TO LEAVE IN WOODLAND

Experts who have studied the question in all its phases have concluded that at least 15% of an agricultural country should be wooded.

Land in Ontario is divided into four classifications:—

1. Cleared,
2. Woodland,
3. Slash,
4. Swamp, Waste or Barren.

The table printed does not show the percentage in slash and swamp, waste or barren. The percentage in cleared land and woodland shows the trend towards deforestation. The percentage in slash and swamp, waste or barren should be considered if a close study of a section is made.

Conditions in a country vary very much and it is wise to have the township figures if conditions of a certain county are being investigated. Conditions of woodland in a certain township may vary considerably as one part may be

almost completely deforested and another part, due to soil conditions, may be fairly heavily wooded.

WOODLAND

The percentage of woodland in some of the counties is very startling. There are two counties below 3%, seven between 3 and 5%, ten between 5 and 7% and seven between 7 and 10%. Township figures are even more so. There are twenty-one townships between 0 and 1%, twenty-five between 1 and 2%, eighty-nine between 2 and 5% and one hundred and twenty-five between 5 and 10%. The woodland figures should be discounted some as a considerable acreage that is classified as woodland is the typical scattered tree pasture that will be in the cleared land column in 25-30 years if pasturing is continued.

A comparison of the percentage of woodland in 1901 and 1934 almost invariably shows a large decrease. Essex county which had 23.5% woodland in 1901 has only 2.6% in 1934. The western and central Ontario counties have a much smaller percentage of woodland than the eastern counties. Waterloo, with 12.0% woodland in 1901 and 12.5 in 1934 stands out as an exception.

The township assessment rolls show many farms in the good agricultural sections with the entire acreage cleared. This is serious as the owners have not an adequate supply of cheap fuel and the cultivated fields lack the protection of woodland. Farmers in these sections cannot depend on their neighbours to grow wood for sale as they can grain, hay, fruit and vegetables.

SLASH

Slash is potential woodland and under wise management would be classified as woodland in 20-40 years. A too common practice is to pasture and clean-cut these stands for fuelwood when they are in the polewood stage. A much better practice would be to shut the cattle out and to secure fuelwood by doing beneficial thinnings.

SWAMP, WASTE OR BARREN

A large percentage of swamp will grow elm, soft maple, black ash, tamarac, spruce and cedar. This land should be kept growing trees rather than deteriorating to a scrub willow or alder type.

The waste or barren areas are usually sandy, shallow, bare rock, and swamps that will not grow trees. All the valuable trees were removed from the sandy shallow sites in lumbering days and the remaining trees, saplings and seedlings were destroyed by fire. These areas will gradually reforest

naturally if there are a few seed trees in the vicinity and if fire is kept out and stock are not pastured. Planting of valuable species on sandy plains is often advisable.

CLEARED LAND

The acreage under cleared land is stripped of trees and the figures in this column show perhaps more conclusively the extent of deforestation than the figure given for woodland, as the percentage of woodland is increased by slash and swamp.

Two counties, Essex and Peel, have over 90% cleared. Five counties have between 85 and 90% and six have between 80 and 85%. There are twenty townships with between 95 and 100% cleared land and fifty-one between 90 and 95%.

There are many localities in Western Ontario where there are twenty farms in a block without woodlots.

Insufficient attention has been given to the preservation and better management of woodland in the agricultural parts of the province. Woodland requires protection from stock and care in management in order that the maximum amount of valuable timber and fuelwood may be grown. It is economically possible to practise intensive forestry in the agricultural sections of the province as the farmer can utilize all material removed in improvement cuttings, and there is a demand from wood-using industries for timber and neighbouring farmers and the residents of the villages and towns for fuelwood.

ASSESSMENT RETURNS ONTARIO COUNTIES

Comparing Percentage of Area in Woodland in Years 1901 & 1934.

COUNTY	YEAR	ACREAGE	PERCENTAGES		DIFFERENCE IN PERCENTAGE OF WOODLAND IN 33 YEARS
			CLEARED	WOODLAND	
Brant.....	1934	218,063	84.2	4.0	- 3.3
	1901			7.3	
Bruce.....	1934	931,245	62.4	7.2	-10.9
	1901			18.1	
Carleton.....	1934	563,035	68.9	13.7	+ 6.6
	1901			7.1	
Dufferin.....	1934	356,389	79.8	5.5	- 5.1
	1901			10.6	
Dundas.....	1934	240,264	79.7	8.4	- 5.2
	1901			13.6	
Durham.....	1934	371,337	84.3	4.4	- 5.3
	1901			9.7	

COUNTY	YEAR	ACREAGE	PERCENTAGES		DIFFERENCE IN PERCENTAGE OF WOODLAND IN 33 YEARS
			CLEARED	WOODLAND	
Elgin.....	1934	436,970	83.7	7.8	
	1901			20.4	-12.6
Essex.....	1934	417,372	91.4	2.6	
	1901			23.5	-20.9
Frontenac South.....	1934	426,336	46.4	13.9	
	1901				
Glengarry.....	1934	288,640	69.4	17.4	
	1901			30.6	-13.2
Grenville.....	1934	273,264	68.5	12.3	
	1901			16.4	-4.1
Grey.....	1934	1,054,384	65.4	8.5	
	1901			17.0	-8.5
Haldimand.....	1934	282,498	88.2	8.1	
	1901			15.8	-7.7
Halton.....	1934	224,385	76.9	6.3	
	1901			11.6	-5.3
So. Hastings.....	1934	407,055	68.4	14.7	
	1901				
Huron.....	1934	803,157	85.6	5.6	
	1901			9.9	-4.3
Kent.....	1934	568,619	88.8	3.5	
	1901			13.7	-10.2
Lambton.....	1934	661,428	84.9	7.7	
	1901			24.4	-16.7
Lanark.....	1934	630,866	53.8	26.6	
	1901			21.6	+5.0
Leeds.....	1934	470,008	58.0	21.1	
	1901			22.1	-1.0
Lennox & Addington.....	1934	337,601	80.2	9.1	
	1901			20.1	-11.0
Lincoln.....	1934	189,344	86.9	5.9	
	1901			12.6	-6.7
Middlesex.....	1934	758,598	89.6	6.4	
	1901			19.0	-12.6
Norfolk.....	1934	394,206	68.8	12.4	
	1901			22.8	-10.4
Northumberland.....	1934	436,073	81.3	9.7	
	1901			10.7	-1.0
Ontario.....	1934	503,542	76.0	6.1	
	1901			6.0	+ .1
Oxford.....	1934	471,467	86.4	5.8	
	1901			10.9	-5.1
Peel.....	1934	301,069	91.3	2.9	
	1901			6.3	-3.4
Perth.....	1934	521,188	88.7	5.8	
	1901			8.4	-2.6
Peterborough South...	1934	377,208	59.5	18.9	
	1901				
Prescott.....	1934	288,773	77.4	7.6	
	1901			23.7	-16.1
Prince Edward.....	1934	236,332	84.3	8.1	
	1901			10.4	-2.3
Renfrew.....	1934	1,033,890	38.2	34.8	
	1901			35.8	-1.0
Russell.....	1934	251,500	68.2	4.4	

DECREASE OF WOODLAND AREA

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COUNTY	YEAR	ACREAGE	PERCENTAGES		DIFFERENCE IN PERCENTAGE OF WOODLAND IN 33 YEARS
			CLEARED	WOODLAND	
Simcoe.....	1901	977,958	71.9	58.5	-54.1
	1934			7.9	
Stormont.....	1901	246,913	67.9	20.4	-12.5
	1934			12.3	
Victoria South.....	1901	302,719	71.4	32.1	-19.8
	1934			3.2	
Waterloo.....	1901	306,665	70.7	12.5	+ .5
	1934			12.0	
Welland.....	1901	222,625	83.2	5.7	- 4.3
	1934			10.0	
Wellington.....	1901	627,640	83.1	4.5	4.6
	1934			9.1	
Wentworth.....	1901	265,367	78.8	4.4	- 3.6
	1934			8.0	
York.....	1901	528,347	84.2	4.4	- 1.7
	1934			6.1	

NOTE: The remainder of the acreage is assessed as slash or swamp, waste and barren. The north parts of Victoria, Peterborough, Hastings, Lennox and Addington, and Frontenac figures are not included as they are in the Laurentian shield and cannot be considered agricultural. Other counties that have large areas in the Laurentian shield are Leeds, Lanark and Renfrew.