

THE FOREST PROPERTY TAX SITUATION IN VIRGINIA

by

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INTRODUCTION

The general property tax has been a mainstay of local government finance since this country was established; and, since its inception, the general property tax on forest lands has been a source of worry. Governor Oliver Wolcott, Jr., of Connecticut, as early as 1819, feared that the property tax was having an ill effect on timber growing and land holding in his state (Hall, 1938).

Forestry interest in the effects of the property tax has continued through the years. In the early 1900's, Charles Lathrop Pack (1910), an early pioneer of forestry in the United States, indicated that as long as trees were taxed as an annual crop, forestry would tend to operate at a loss.

The high interest in forest taxation culminated with the Forest Taxation Inquiry, a study authorized by an amendment to the Clarke-McNary Act of 1924. The report of this inquiry in 1935 provided new insight into the forest taxation problem. However, as the nation climbed out of the Depression and the Second World War pushed timber prices upward, interest in taxation of forest property dwindled.

Recently, revenue requirements of local governments have increased and taxes have kept pace with these demands. Timber prices, however, have remained fairly stable in the past few years (Hair and Ulrich, 1963). Predictably, interest in taxation affects on forests and forest management decisions has reappeared.

Several facts are relevant in assessing the possible influence of forest property taxation in Virginia. Almost 60 per cent of Virginia's

land area is commercial forest land. Of this area, over 90 per cent is owned by approximately 200 thousand private landowners (Larson and Bryan, 1959). Therefore, the acreage of forest land subject to ad valorem taxation comprises more than half the state's total land area.

Virginia's forest land and the products derived from it contribute significantly to the economy of the state. The value of primary forest products harvested in Virginia in 1958 was 87.9 million dollars (Hair and Ulrich, 1963). Approximately 38 thousand persons were employed in the harvest and primary manufacture of these forest products (Hair, 1963). More than 1.7 million cords of pulpwood, which served as raw material for mills in Virginia and adjoining states, were harvested in Virginia in 1963. The pulp mills in Virginia alone have a capacity of four thousand tons per day (Knight and Nichols, 1964). The state's average property tax rate has risen nearly 25 per cent in the past ten years; in some counties the rate has risen 70 per cent or more (State of Virginia, 1952; 1961).

The importance of forests to Virginia's economy and the clearly rising trend in property tax rates indicates that the forest property tax situation is of general interest in Virginia. Presently, there is no single published report which combines and evaluates the theory and information relevant to forest property taxation in Virginia. Therefore, this study of the forest property tax situation is justified.

Objectives

1. To review and summarize the theoretical aspects of ad valorem forest property taxation; including a definition of equity for such taxation.

2. To describe the actual ad valorem forest property tax situation in Virginia.
3. To compare the general theory with Virginia's forest property tax situation with respect to:
 - a. equity
 - b. possible influence on forest land ownership and management.
4. To indicate areas for additional research.

Scope

The study will encompass more than just the bare facts of the Virginia property tax laws affecting forestry. An understanding of the theoretical background for forest property taxation in general is prerequisite to the study and understanding of a specific situation. Therefore, in the first part of the study, two theoretical aspects of ad valorem taxation in relation to forest land will be discussed. The first will be the general concept of ad valorem taxation, including a specific definition of ad valorem property taxation, and the operational structure of the general property tax. The second theoretical aspect of property taxation to be considered will be the effects of the property tax on forest management. Parcel bias and deferred yield bias, as well as the difficult and controversial question of equity in forest property taxation will be considered.

The second primary section of the study will establish the actual forest tax situation in Virginia. This section will consider the past history of the general forest property tax in Virginia, its legal

background and actual appraisal and assessment procedures. The probable impact of the Virginia property tax on forest management decisions and properties will then be discussed. Recommendations for further studies will be made.

The study is not empirical in scope. Rather, it is hoped that the study will provide a foundation or basing point for subsequent studies. While it is true that definite conclusions regarding such things as the amount of inequity in forest property taxation cannot be definitely proven without supporting data, until the underlying theory and institutional aspects are fully understood, the relevant data may be indiscernable.

LITERATURE REVIEW

Over the years, the general property tax on forest land has been blamed for everything from timber exploitation to unemployment. As a result, much has been written concerning the effects of the property tax on forest land management; and yet, there have been few adopted proposals for improving the situation.

Among the forest economists who have expressed dissatisfaction with the ad valorem property tax are Fairchild, Duerr, Marquis, Zivnuska, Lewis, and Hargreaves.

Fairchild (1935) produced the earliest complete analysis of property taxation of forest land. His quarrel with the general property tax centered around the fact that income from forest land is not realized annually, while payment of taxes is annual. Because of this discrepancy, and because of the necessity of capitalizing annual tax payments until revenue is received, the property tax may take a higher proportion of annual income from forests than from a property yielding annual income.

The way in which Fairchild proposed to remedy the situation was by modification of the ad valorem property tax. Three basic modifications were proposed: (1) the adjusted property tax, in which tax deductions are given for the previous years' taxes and interest on the timber investment; (2) the deferred timber tax, in which taxes on land and timber are paid at harvest; and (3) the differential timber tax, in which land and timber are taxed at different rates. Any of these modified property taxes would, if property applied, relieve the forest property owner of the inequities described by Fairchild.

Duerr (1960:443-455) felt that the form of the general property tax allowed double taxation and gave a higher tax ratio on forest land than on other types of real estate. Duerr's favored correction of the faults in the general property tax was the adjusted property tax as proposed by Fairchild, though he believed that the deferred timber tax and the differential timber tax were also workable.

Marquis (1952) argued against applying the general property tax to forest land on the basis that it might discourage the growing of forest crops; although he also believed that as sustained yield forestry became more common, taxation could become less of a barrier. Marquis based his argument on the same facts as Fairchild, namely, that income is intermittent, while taxes must be paid annually.

As an antidote to the problems of the general property tax, Marquis proposed that a yield tax be substituted for the general property tax on forest land. A yield tax would be paid only when the timber was cut, either as a percentage of gross yield, or on a unit rate basis, while the general property tax would still be levied annually on the land. At the time of Marquis' proposal, 14 states had adopted the yield tax. By 1956, there were still only 14 states using yield taxes. Of these 14 state yield tax laws, 11 were optional and only three were mandatory (Williams, 1957).

Some arguments for replacement of the general property tax with a yield tax occurred prior to Marquis' proposal. In 1930 the Chamber of Commerce of the United States (1930:5) said:

It is obvious that a year's growth of a tree, although it may be considered a year's income from a particular piece of land, cannot always be removed and marketed to satisfy the demands of the tax collector.... It is logical, therefore, that forest taxes be on the harvest or yield, rather than on an annual basis.

Zivnuska (1952:241-244) also believed that the general property tax was detrimental to forestry. His reasons paralleled those of Fairchild and Marquis. As a solution, Zivnuska stated:

Basically, the type of tax change that would be helpful to a forestry enterprise in making cyclical adjustments would be a shift from property taxation to income taxation. This would result in direct cyclical fluctuations in tax payments.... the pure yield tax would permit the complete conversion of annual tax charges to a cyclically varying basis.

In mentioning a pure yield tax, Zivnuska went one step further than Marquis, and proposed that timber and land be taxed on a percentage of yield at harvest.

A third solution to the property tax problem has been proposed by several writers including Lewis (1962) and Hargreaves (1964; 1965a; 1965b). Their solution is the forest productivity tax, which taxes forest land on its ability to produce timber, not on what timber is on the land at tax time. Four states, Florida, Maine, Minnesota, and Oregon, have a productivity tax and a productivity tax has been proposed for Georgia (Hargreaves, et al., 1965a).

Lewis (1962) did not state objections to the general property tax but listed several general difficulties of forest land taxation. He went on to propose a specific type of productivity tax which he believed would overcome the difficulties.

Hargreaves (1964; 1965a; 1965b) objected to the general property tax for the reason that forest lands inevitably bear double taxation. He also pointed out that in Georgia, poor assessment procedures other than those built into the law compound the difficulties. Hargreaves proposed a productivity tax based on the site index of a parcel as site quality is correlated with the volume of timber which may be grown.

There has been only one recent study of the forest taxation situation in Virginia. White (1951) suggested that the general property tax was the best solution to the forest taxation situation in Virginia. However, Forberg has recently indicated that the general property tax is not the best way to tax Virginia's timberland and further suggested that a yield tax might be the answer to the problem.^{1/}

^{1/} Letter from F. C. Forberg, Director of the Virginia Division of Real Estate Appraisal and Mapping, to State Senator Fitzgerald Bemiss, dated January 3, 1963.

THE GENERAL PROPERTY TAX

Webster's New World Dictionary of the American Language defines a tax as "a compulsory payment of a percentage of income, property value, sales price, etc., for the support of a government." The justification for a tax, in addition to raising revenue, may be to regulate business activities, promote social objectives, or any combination of these. The tax which this study will consider is a revenue raising tax, based on the value (ad valorem) of some portion, or all, of a person's possessions. It is commonly expressed as a rate (per cent) of property value. The usual basis for determining property value is "fair market value." Buehler (1940:405) defined fair market value as, "a normal or typical value, which may not coincide with the current selling price of the property."

The general property tax is the financial mainstay of many governments, both state and local. Its use seems to be based upon three principal reasons:

1. Tradition
2. Ease of administration
3. Property holdings are easily discovered

The latter two reasons are the main justifications for the general property tax.

When the general property tax originated, it supposedly covered all property held by an individual, including real property, tangible personal property, and intangible personal property. However, for most tax units, the general property tax has become more specific and

presently covers only real property and tangible personal property. It is the real property tax which is of interest in connection with forestry. Real forest property affected by the general property tax includes land, improvements on land, and standing timber. In many states, timber value is considered a part of the land value.

Procedures

The general procedural steps for property taxation are fairly standardized. It is convenient to divide the mechanics of general property taxation into five steps (Duerr, 1960:432-433): (1) assessment, (2) budgeting, (3) setting the tax rate, (4) billing the taxpayer, and, (5) dealing with tax delinquency.

Assessment

In the assessment process, each parcel is assigned a value. The value may be based on recent sales of similar properties, the assessor's judgement, or may be fixed by law for various kinds of properties. Depending on the taxing unit, assessed value may or may not be full value. For example, in a given taxing unit, assessed value may be 25 per cent of fair market or appraised value. As long as all properties in a taxing unit are assessed at the same percentage, fractional assessment will not affect the amount of the tax. Assessments are subject to review, at which time aggrieved taxpayers may attempt to show that their parcels are overvalued in relation to similar parcels. Equalization between parcels or districts may be necessary. Equalization is the adjustment of assessments so that they are uniform with respect to per cent of true value throughout a taxing unit.

Budgeting

Budgeting consists of forecasting total expenditures for all unit functions for the pertinent fiscal period. These costs are apportioned between tax sources and the total necessary income from the property tax is computed. Budgeting may come interchangeably with the setting of the tax rate.

Setting the Tax Rate

Setting the tax rate consists of dividing the total assessed value into the necessary revenue, and multiplying by 100 to get a per cent tax rate. For example, with a total assessed value of one million dollars and revenue needs of 20 thousand dollars:

$$\frac{\$ 20,000}{\$1,000,000} \times 100 = 2 \text{ per cent}$$

The tax is then two dollars per 100 dollars of assessed value for all properties in the taxing unit.

Occasionally the tax rate is fixed by law. In this case, the assessment must be varied to raise the necessary tax revenues. For example:

The tax rate is 2 per cent (or 0.02)

Revenue needed is 20 thousand dollars

Assessed value, X is:

$$\frac{\$20,000}{X} = 0.02$$

$$0.02X = \$20,000$$

$$X = \$1,000,000$$

Thus, assessed value must be one million dollars. As indicated, the

assessed value may be less than, or equal to fair market value.

A third case would be the situation in which both tax rate and assessed value are fixed by law. In this case the tax would be fixed.

Billing the Taxpayer

The total bill is established for each parcel by multiplying the rate times the assessed value for the parcel. The bill is then sent to the taxpayer.

Dealing with Delinquency

Dealing with tax delinquency is the last step, and one which may or may not be necessary for every tax unit in any given tax period. Tax delinquency (non-payment or late payment of taxes) is dealt with in various fashions in various tax units. The usual way is to assess monetary penalties on the taxpayer. The ultimate tax penalty, which many units hesitate to employ, is sale of the parcel for back taxes.

Property Tax Equity

For the purposes of this study, an equitable property tax will be defined as one which reduces the annual net income derived from all parcels of property in a taxing unit by a common percentage. Property taxation by definition taxes property value, not income. Therefore, for the tax to be equitable, property value must reflect income producing potential.

THE GENERAL FOREST PROPERTY TAX

There are two main objectives which could be considered in studying forest property taxation. One is the national objective. The second is the objective of the individual forest owner. National or society objectives will not be considered in this study.

The objectives of any individual owner may be numerous; certainly, for private forest owners as a group, they will be diverse. However, in this study only one objective and one type of owner will be considered. The owner is the representative individual or firm in the business of growing stumpage, with the sole objective of maximizing profit from stumpage production.

It is doubtful that any forest owner has only the above objective. However, it is certainly a primary objective for many owners and is the only one considered in this study. Obviously, for such an owner, property taxes are a cost of stumpage production. The owner's forest management will reflect the cost.

Equity

A general definition of property tax equity was given previously. The definition stated that an equitable property tax reduces annual net income of all properties within a taxing unit by a common percentage. The definition requires that deferred yield investments such as timber land and annual yield investments such as farmland must have their annual or equivalent annual incomes reduced by a common percentage.

The annual net income for farmland is obviously the net income received in any given year. For equitable taxation, the average over a

period of years should be used. The equivalent annual net income for a deferred yield property can be computed by the formula (Walker, 1958: 60):

$$EAI = \frac{Vn \cdot p}{(1 + p)^n - 1}$$

Where:

EAI is equivalent annual income

Vn is net income occurring every n years

p is the appropriate rate of interest ^{2/}

Assume an acre of agricultural land which produces 100 dollars per acre per year net income. If the appropriate interest rate is five per cent, the value of the acre of agricultural land, based on its income producing ability is (Walker, 1958:18):

$$\frac{\$100}{.05} = \$2000$$

If the tax rate is one per cent, the annual tax payment is 20 dollars per acre, which is 20 per cent of annual net income.

Next, consider an acre of forest land which produces 100 dollars of net income at 20 year intervals. At five per cent interest, the value of the acre of forest land, based on its income producing ability is (Walker, 1958:18):

$$\frac{\$100}{(1.05)^{20} - 1} = \$60.12$$

^{2/} The rate of interest used to calculate EAI influences the tax which may be equitably charged to a property. The actual choice of interest rate would be a major decision for a taxing authority. Such a choice would require a major study to determine proper criteria.

If the tax rate is one per cent, annual tax paid is 60 cents (\$0.60) per acre per year. If the appropriate rate of interest is still five per cent, the annual net income equivalent to 100 dollars at 20 year intervals is:

$$EAI = \frac{\$100 (.05)}{(1.05)^{20} - 1} = \$3.02$$

The annual tax paid is 20 percent of the equivalent annual net income. The annual tax accumulated at five per cent interest for 20 years (Walker, 1958:19) is:

$$\frac{.6012}{.05} \left[(1.05)^{20} - 1 \right] = \$20.00$$

This 20 dollars is 20 per cent of total net income. Thus, such a tax satisfies the definition of equity for both annual and deferred yield properties.

The primary conclusion to be drawn from the preceding discussion is that, if the fair market value of forest land, based on the income producing ability of the land, is multiplied by the tax rate, the result is the maximum annual tax which can be equitably levied against that land.

However, the common method of taxing forest land is to tax not only the fair market value of the land, but also standing timber. For example, in the above illustration, fair market value of forest land was \$60.12 per acre. If timber value (Y) is related to stand age (X) in the following manner:

$$Y = 5X,$$

timber value will range from five dollars per acre at year one to 100 dollars at year 20.

If the one per cent tax is levied on both land value and the changing timber value, the accumulated tax, at five per cent interest, after 20 years is approximately 35 dollars per acre. Consequently, net income from forest land is reduced by 35 per cent compared with 20 per cent for the annual yield land. Therefore, if the appraised value of the forest land is related to the income producing ability of the land, and timber is also taxed, an environment conducive to inequitable taxation of forest land results.

The above situation, in which both land and timber values are taxed, has been called "time bias" (Duerr, 1960:446). Actually the situation might more explicitly be called deferred yield bias.

Another form of bias in property taxation is "parcel bias" (Duerr, 1960:445). Parcel bias occurs when different parcels of property within a taxing unit are not proportionately represented by their assessed values.

Parcel bias may occur in two ways. The first is a tendency toward an average assessment within a class of property; the second is discrimination between classes of property. Bird (1940) cited an example of the first kind of parcel bias in New York. In this case there was a tendency to assess all parcels of timber at an average amount, regardless of the value of the standing timber.

The second type of parcel bias was shown by Williams (1959). He cited an example of property assessment in Wisconsin in which

agricultural land was assessed at 56 per cent of true value, timber at 94 per cent, and cutover land at 162 per cent. Here, clearly, was parcel bias at an extreme.

Parcel bias is a symptom of poor assessment practices. There are several reasons for poor assessment, of which the most important is that assessors are frequently not trained in forest appraisal and assessment. Even though some assessors may have a fairly good background of urban assessment experience, it is the rare one who is expert in forest assessment and appraisal. There are other reasons for parcel bias, among which are lack of time to do the job properly, and lack of sufficient funds.

The Effect of Property Taxation on Forest Management

The costs incurred by any enterprise can generally be segregated into fixed costs and variable costs. By definition, a fixed cost is one which does not vary with output, while a variable cost is one which does vary with output.

Whether or not a tax is a fixed or variable cost is important because of its effect on management. If a tax is fixed, the same amount must be paid regardless of production; such a fixed tax can be considered neutral with respect to management decisions. On the other hand, if the tax is not fixed, but varies with the level of production, then management decisions must consider resultant tax changes.

As commonly applied to forest land, the general property tax is a variable cost of production. This results from reassessments which increase taxes as timber values increase (the same factor which causes

deferred yield bias). Therefore, forest management decisions will generally reflect the influence of the property tax. For example, the amount which can be invested in a cultural operation will have to be reduced by the present value of the increased tax.

The general influence of fixed and variable property taxes on forest management decisions can be illustrated by considering a hypothetical profit function for a forestry operation. Assume, before considering the tax, that the profit from a certain forestry operation can be expressed by the equation:

$$\pi = C_0 + C_1X - C_2X^2$$

where: π = profit

C_0, C_1, C_2 = regression coefficients

X = age of timber (or any relevant variable)

The age which maximizes profit can be found by setting the first derivative of the profit equation equal to zero and solving for X .^{3/}

$$\frac{d\pi}{dx} = C_1 - 2C_2X$$

$$X = \frac{C_1}{2C_2}$$

If a fixed tax is imposed upon the operation, the profit equation becomes:

$$\pi = C_0 + C_1X - C_2X^2 - T$$

where: T = the amount of tax

^{3/} In order to be sure of a maximum rather than minimum profit, it is also necessary for the second derivative of the profit function to be negative.

Then, $\frac{d\pi}{dx} = C_1 - 2C_2 X$

and profit is maximized when $x = \frac{C_1}{2C_2}$, the same age as with no tax.

However, if a tax which varies with age of timber is imposed upon the operation, the profit equation becomes:

$$\pi = C_0 + C_1 X - C_2 X^2 - TX$$

Then, $\frac{d\pi}{dx} = C_1 - 2C_2 X - T$

and profit is maximized when

$$X = \frac{C_1 - T}{2C_2}$$

Consequently, as the level of T changes, X changes.

The above development is generally summarized by the statement:

"A fixed tax is considered neutral while a variable tax has a dynamic affect with respect to management decisions."

Conclusions

Two main conclusions may be drawn from this section. First, as generally applied to forest property, the general property tax contains inherent possibilities for inequitable taxation. The inequity can result from parcel bias an/or deferred yield bias. Parcel bias is possible in all property taxation; its generally recommended cure is better informed assessors.

Deferred yield bias is common only to deferred yield properties, such as timber land. This bias results from a double taxing of timber value; once on the land value which is based on timber producing potential, and again on the timber value itself. In order to overcome deferred yield bias, only the value of the land should be taxed.

The second conclusion is that, if the property tax does vary with timber volume or value, the tax is a variable cost and has a dynamic effect on forest management. On the other hand, a tax based only on the fair market value of forest land is fixed with respect to actual timber volume or value and therefore, has a neutral effect on management decisions.

THE FOREST PROPERTY TAX IN VIRGINIA

The previous sections outlined the general forest property tax and developed a standard of equity for the tax. The purpose of this section is to review the forest property tax situation in Virginia with respect to the general situation. Of the steps involved in property taxation, the assessment function is of primary interest to forest landowners and will receive the most emphasis.

Tax History

Property taxation has been practiced in Virginia, in one form or another, since the state was founded. Flippen (1915) theorizes that property taxation developed from the quit-rents paid to the Crown while Virginia was a British Colony. Prior to 1926, the State assessed property for its own taxation, as well as that of the counties. Since the amending of the Code of Virginia in March 1926, the general property tax, except on the rolling stock of public service corporations, has been relegated to the counties. In June 1928, the Constitution of the state of Virginia was revised to conform with the Code. Presently, the taxation of intangible personal property is reserved for the State. County property taxation is separated into personal property and real estate taxation. The latter is the relevant tax with respect to forestry.

Assessment

The Code of Virginia (§§ 58-760)^{4/} states that all property within

^{4/} This section, and all relevant sections of the Code of Virginia, and the Constitution are in the Appendix.

a county except that specifically exempted, is to be taxed annually. As noted, certain types of property are exempt from taxation. However, except in rare instances, this does not include forest land.

The Code of Virginia and the Constitution of Virginia do not prohibit special assessment of standing timber under the general property tax, although there is no special section authorizing such assessment. At one time, 1889-1890, there was a special amendment to the Code which provided for the separation of land and timber under the general property tax (Acts 1889-90:137). This does not mean that any form of tax other than general property taxation could be used to tax timber. Such taxation would require an amendment to the Constitution of Virginia. This requirement results from Section 168 of the Constitution, which calls for uniform taxation. Uniform taxation is not defined, but it is usually considered that uniform taxation means the general property tax. Thus, it becomes evident that timber in Virginia will be taxed and at present must be taxed similar to all other real property.

Section 169 calls for assessment of property at fair market value. However, this does not occur in Virginia and is generally ignored by assessors. The assessment of property at less than fair market value is accepted by the State Supreme Court, as long as the rule of uniform taxation is followed (176 Va. 216). Fractional assessment has occurred in Virginia for many years. Property may be assessed at any portion of market value, so long as the rule of uniform taxation is not violated. Fractional assessment occurs and likely will continue to occur because the State assesses property owned by public service

corporations for the counties.^{5/} The assessment ratio used for this property is 40 per cent, statewide. Obviously it is politically expedient for counties to assess property at less than 40 per cent of market value. As long as the county ratio is less than 40 per cent, public service corporations bear a disproportionately high share of the tax burden, allowing the average county citizen to pay lower taxes. As previously noted, assessment ratios vary from county to county, and will probably never become uniform except through State legislative action.^{6/} So long as all tax parcels are assessed at the same percentage of fair market value, fractional assessment should not affect forest management.

The Code of Virginia requires that there shall be general reassessment of all taxable property in all cities and counties periodically. Reassessment dates are divided among the counties according to their population and the date of some previous assessment. The general provisions of the Tax Code require that counties reassess every six years (§§ 58-784.2). Counties with a population of 21,000, according to the 1940 census, were required to reassess in 1951 and every six years thereafter (§§ 58-780). The next reassessment for these counties will be 1969, if the six year interval is, or was, followed. However,

^{5/} Letter from F. C. Forberg, Director of the Virginia Division of Real Estate Appraisal and Mapping, to State Senator Fitzgerald Bemiss, dated, January 3, 1963.

^{6/} op. cit.

these counties, if they have more than 2,000 persons per square mile, may reassess every four years, according to one special provision of the Code (SS 58-778). In addition, the Board of Supervisors of any county may authorize reassessment at any time (SS 58-784.3).

These provisions have no particular individual effect on forestry. Taken together, however, they create the situation in which deferred yield bias can occur, because forest lands can be reassessed several times during a rotation.

Assessment of real estate (including timber) involves the making of a decision as to value by some person or persons. In Virginia, this is the assessor or the board of assessors. The board of assessors or the assessor is appointed by the judge of the circuit court (SS 58-787). Members of the board of assessors must be resident freeholders of the county concerned (SS 58-789).

The board of assessors may hire a professional appraisal technician or do the field work themselves. If they do not choose to do either of these, they may request help from the State Department of Taxation. (SS 58-794). This aid has been requested by most counties which do not hire professional appraisal technicians.

As soon as possible after January first of the year designated for reassessment, assessors (or appraisal personnel) are required to make an examination of all assessable property, in order to determine its fair market value (SS 58-790). An original and two copies of the reassessment are made, and a sworn affidavit is made by the board of assessors that it is accurate. The original is filed with the clerk

of the county court, one copy goes to the county commissioner of revenue, and the other copy goes to the county board of equalization. The recapitulation sheets are sent to the Department of Taxation (SS 58-791). An extension of up to sixty days may be granted by the judge of the circuit court if reassessment is not completed by the end of the year (SS 58-792).

The actual mechanics of appraisal requires establishment of unit appraised values for each county being reassessed and for various classes of property within each county. This is done by the board of assessors in conjunction with the Department of Taxation. If possible values are established from recent bona fide sales in the locality. The values for any given class of property are listed as a range. These ranges are supplied to the appraisal technicians on a standard form (Fig. 1). Values for forest land will reflect basic timber value, accessibility, and land value.

The appraisal technicians then visit each parcel in the county and note their findings on a permanent record card (Fig. 2 and Fig. 3). The total parcel value is the sum of the number of acres in each classification times the respective value for the classification, plus the value of any improvements. The assessment ratio is then applied to the market value determined by appraisal in order to find the assessed value for taxation. Standard procedure is used to determine the tax rate, collection, and the other steps in property taxation.

UNIT APPRAISED VALUES PER ACRE ESTABLISHED BY BOARD OF ASSESSORS FOR COUNTY FOR FIELD USE BY REAL ESTATE APPRAISAL TECHNICIANS

APPRAISED VALUE PER ACRE

I. FULLY CLEARED, TILLABLE

1. Highly productive, well situated	\$ _____	to \$ _____
2. Highly productive, poorly situated	\$ _____	to \$ _____
3. Poorly productive, well situated	\$ _____	to \$ _____
4. Poorly productive, poorly situated	\$ _____	to \$ _____

II. SEMI CLEARED OR SUITABLE FOR PASTURE ONLY

1. Average to highest quality	\$ _____	to \$ _____
2. Lowest to average quality	\$ _____	to \$ _____

III. WOODED LAND

1. Well timbered, marketable saw timber	\$ _____	to \$ _____
2. Well timbered, marketable as pulp or stove	\$ _____	to \$ _____
3. Plantation or reset	\$ _____	to \$ _____
4. Cut-over, or young growth, not marketable	\$ _____	to \$ _____

IV. SWAMP, MARSH OR INACCESSABLE MOUNTAIN LAND

\$ _____	to \$ _____
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Fig. 1. Form used by State Department of Taxation technicians to list unit values for real estate appraisal

NAME _____ MAP NO: _____ RACE W C

DESCRIPTION _____ DISTRICT _____

MAIN BUILDING									
USE	CONSTRUCTION	EXTERIOR FINISH	INTERIOR FINISH	ROOFING	GENERAL FEATURES	PLUMBING & HEATING			
Dwelling	Wood Frame	Wood Siding	Plaster	Comp. Sh.	Year Built	Bathrooms			
Store	Steel Frame	Brick	Wall Board	Slate	No. Rooms	Basement			
Service Station	Tile-C. Bk	Asb-wood shing.	C'ed	Asbestos	No. Stories	Fireplace			
Garage	Brick	C. Block	Panel	Metal	Foundation	Stoves			
Factory	Mll	Stucco	Tile	Tar&Grav.	Floors	Cent. Heat			
	Reinf. Conc.				Porch	Floor Fur.			
X	X								
		CU. FT.	UNIT FACTOR	TOTAL	Physical Depreciation or Obsolescence	APPRAISED VALUE			
		SG. FT.				\$			

OUT BUILDINGS				
USE	CONSTRUCTION	CONDITION	SIZE	GEN. REMARKS
Garage				
Barn				
Chicken House				
Tenant House				
Misc. Bldg.				

Total Appraised Value All Improvements \$

LAND									
USE	No. Acres	Value Per Acre	TOTAL	Lots					
				Lot No.	Zoning	Size	Front Ft. Factor	Appraised Value	
1. Tillable									
2. Pasture									
3. Timber									
4. Cut Over									
5. Marsh - Mountain									
6. Commercial									
7. Industrial									
8. Mineral									
TOTALS			\$						

Total Appraised Value All Lands \$

Notes:

BUILDING PERMITS						RECAPITULATION		
No.	Type	Date	% of Comp.	Final A		APPRAISED VALUE		ASSESSED VALUE
					Land	\$		\$
					Bldgs.	\$		\$
					TOTAL	\$		\$

Fig. 2. Sample of real estate record card used by state and county personnel in real estate assessment and reassessment--front

Relation of the Virginia Situation to the General Case

Nothing in this section can be so construed as to indicate that the Virginia forest tax situation is materially different from the general application of the ad valorem property tax to forest lands. With this in mind, it is helpful to recall the conclusions which were drawn from the discussion of the general forest property tax.

1. As generally applied to forest lands, the general ad valorem property tax provides for the occurrence of parcel bias and/or deferred yield bias.
2. The general property tax is usually administered so that it may be considered a variable cost of timber production. As such, it will have a dynamic effect on forest management decisions.

It is fairly safe to say, then, that forest lands in Virginia will be subject to the consequences of these conclusions. However, a conclusive statement as to the scope and magnitude of the consequences, based on this study, would be pure speculation. Further study is necessary to determine and quantify the consequences of parcel bias and deferred yield bias, as well as the effects of variable cost taxation.

ALTERNATIVES TO THE GENERAL PROPERTY TAX ON FOREST LAND

Because of the early interest in the effects of ad valorem property taxation on forestry and the realization that it tends to discriminate against forestry, many alternatives have been proposed. Since the Virginia real estate tax, as applied to forest lands, is identical to the general model of an ad valorem property tax, it will be profitable to review a few of the more common suggested alternatives.

Bounties and Rebates

Bounties and rebates were adopted by several mid-western and western states after the Civil War. Bounties provided cash payments for planting or maintenance of trees, for a limited length of time. Rebates reduce property taxes for the same purpose. As these laws were optional, they rapidly fell into disuse. Only two states, New Hampshire and South Dakota, have bounty or rebate laws at present (Williams, 1957).

Exemptions

Some twelve states have exemption laws. Under these laws, the timber or the land and timber are exempted from the payment of property taxes. The laws are mandatory in most of the states in order that initiative may be placed in the hands of the states. Exemption laws may also serve as regulatory features for the landowners, forcing them to adopt certain forest practices.

The laws all have one feature which may tax authorities dislike; they tend to establish a subsidy for forest landowners.

Modified Property Tax Laws

The "Report of the Forest Taxation Inquiry", proposed that one of

three modified property tax laws be adopted by all states. The proposed taxes were:

1. The adjusted property tax
2. The deferred timber tax
3. The differential timber tax

Of these three proposals, only one has been accepted. The deferred timber tax, was instituted as an optional tax in Washington in 1941. The other two have never been implemented. However, for the sake of comparison, all three will be reviewed.

Adjusted Property Tax

The adjusted property tax seeks to adjust the ad valorem property tax to the peculiarities of the forest property. It seeks to do this by exempting from taxation (1) interest on the investment, and (2) taxes on the investment. The tax works as in the following example taken from Fairchild (1935:60).

Assessed value	<u>\$1,000</u>
Interest on the investment (3%)	\$ 30
Taxes paid in previous years	<u>\$ 25</u>
Total	\$ 55
Less yield in the tax year	<u>\$ 10</u>
Adjusted value increment	\$ 45

Subtracted from the \$1000 assessed value gives an adjusted tax base of \$955. The adjusted value increment is accumulated from year-to-year. When there is an accidental loss, such as from fire, the assessed value and accumulated adjusted value increment are reduced. This tax

would cause a progressive lowering of the tax burden as the period of income deferrment lengthened. The burden of the tax remains on the landowner. However, it would be a complex adjustment to compute and record.

Deferred Timber Tax

The deferred timber tax shifts the burden of the tax onto the state. This procedure has the state assuming part of the risk of destructive losses. Under this plan, the land and timber would be assessed at the regular intervals. The property tax on the land would be collected annually; whereas the tax on the timber would be paid only when the timber was cut. A special state fund would be set up, which would permit localities to draw an amount equal to the timber tax lost from the state in lieu of the taxes. When the timber was harvested, the owner would pay the accumulated taxes plus simple interest to the state.

Differential Timber Tax

The differential timber tax simply involves assessing land and timber separately and then applying a reduction factor to the assessed value of the timber. It would be the simplest of the three alternatives to apply, but the basic objection to subsidies holds with this tax method.

Other Modified Property Taxes

Williams (1957) listed three other kinds of modified property taxes:

1. Fixed assessment

2. Differential tax

3. Fixed tax

Fixed assessment taxes are used by Indiana, Iowa, and Puerto Rico. They provide that timberland be assessed at a fixed value per acre. The tax is used to promote specific management objectives and is similar to a rebate or exemption law.

The differential tax is employed by Ohio. It differs from the differential timber tax proposed by Fairchild in that both land and timber are taxed at the lower rate.

The fixed rate tax is used by Wisconsin in order to promote small woodlot management. It is similar to the fixed assessment law except that the tax rate, not the assessment, is fixed.

Faults

All of the modified property tax laws in existence have one common weakness. That is, they are optional for a restricted class of land. They are all inequitable in the sense that they are optional and provide a subsidy to certain timber owners which is not available to all. Their only justification is the promotion of specific management or social objectives. In general, most of these modified property tax laws have another fault; their administration would be complicated. For this reason, these proposals will probably not be developed for Virginia unless some less complicated method of administration is devised and unless they are made mandatory in nature.

Yield Taxes

As indicated in the literature review, several prominent forest economists favor a yield tax in place of the ad valorem property tax.

It was also indicated that Mr. F. C. Forberg, Director of the Virginia Division of Real Estate Appraisal and Mapping is of the same opinion. Fourteen states at present have yield taxes (Williams, 1957), indicating that yield taxes probably offer some substantial advantages over the ad valorem property tax.

The essential provision of a yield tax is that taxes on growing timber are postponed until harvest. However, taxes are still paid annually on the land (Marquis, 1952). The amount of the yield tax is determined by the value of timber cut. Rates can be made to equate with payments under the annual ad valorem property tax, or, if the tax is optional, a subsidy can be incorporated to promote certain forestry practices. An important feature of a yield tax is that it tends to promote stable land ownership by relieving the owner of annual payments on the growing timber crop.

There are two major drawbacks to the yield tax. One, revenues paid to the counties would decline, at least at the first, after a yield tax was instituted (Duerr, 1960:457). Two the yield tax is a gross income tax, and is subject to the disadvantages of such a tax. The major objection to a gross income tax is that it bears upon optimum output (Duerr, 1960:460); and, theoretically could tax away all profit.

Productivity Taxes

A final alternative to ad valorem property taxation is the so-called "productivity tax." The productivity tax is the only tax discussed in this study which meets the proposed standard of equity for forest property taxation. The tax is based on the value of land for

growing timber. The timber itself is not taxed. The fact that land has an intrinsic value for timber growing was recognized as early as 1921 (Hastings, 1921). Such a tax was instituted in Sweden in 1922 (Jonson, 1925). Murphy (1924; 1925), James (1960), Fedkiw (1961), and Lewis (1962) have all called for a productivity tax as a solution to the problems and inequities of forest taxation. Four states, Florida, Maine, Minnesota, and Oregon, have productivity taxes in effect, and in a fifth state, Georgia, there is a good chance of one being instituted. A productivity tax is (Fedkiw, 1961:16-17):

...an ad valorem tax but is based on the market value of unstocked forest land for timber production. In principle, it removes biases associated with the diminishing returns phenomenon, differences in site productivity, the ratio of capital to sales revenue, and the deferral of earnings. The last bias is removed insofar as present fair market values for forest land are a reflection of the discounted net worth of future timber growth...

...Such a tax is probably about as neutral as an ad valorem tax or substitute tax form can be for the forest business. Once the site is determined and its fair market value assessed, the tax paid is fixed per acre and not affected by any management decisions. The only changes that would normally occur are those which would stem from changes in the tax rate or the general price level. Such changes generally affect all property subject to the ad valorem tax in more or less the same way. There would no longer be the need to report timber cut to lower assessment or for assessors to continually reassess the growing stock. Site is a more or less permanent, stable condition. Administration of the tax from both the owners' and public viewpoint would be greatly simplified once installed, thereby tending to produce more or less cost savings for both interests.

Because the site tax might increase the current cash cost of holding forest land with submerchantable growing stock and non-stocked land, there would be a tendency for some forest lands to shift into more affluent ownership. This would be consistent with established national goals for a high level of timber output and industrial interest

in abundance of raw material. Temporarily such shifts might be politically unpopular, but this would not alter the merit of the law for improving the forest ownership pattern and forest productivity. It does not have much merit as an optional law where the alternative of the general ad valorem tax is available. Owners with growing stock would tend to elect the option and those with nonstocked lands or very young stands would stay with the general ad valorem tax where it would be lower. This arrangement, at least temporarily, could jeopardize the tax income of communities heavily dependent upon taxes from timberlands.

The merit of the productivity tax is in its neutrality toward management decisions, potential cost savings in administration of all interests, reduction of the human element in timberland taxation, and greater freedom from some of the biases of other tax forms.

There are two approaches to valuing the land for the productivity tax, one of which is classification by site, as mentioned above.

Examples of this approach are the Oregon tax and the proposed tax for Georgia. The second approach to productivity taxation is the one used by Minnesota in its tree growth tax law.

In the Minnesota tree growth tax law, forest type is determined, annual growth rate per acre for this type is determined on a county-wide basis, price per cord for each species is determined on a county-wide basis, and the tax is computed as follows. The tax for productive forest land is thirty per cent of the product of the acres found in each forest type in an ownership times the average annual growth rate for the type times the stumpage price for the species. Temporarily non-productive lands are taxed at five cents per acre per year until replanted. Permanently non-productive lands are taxed at the same rate as temporarily non-productive lands (State of Minnesota, 1962).

A study of the effects of the Minnesota tree growth tax law by Skok

and Lindmark (1964) has indicated that for the owners who have accepted it, the tax burden has been reduced by some 58 per cent per acre on an average. The study also indicated that the per acre tax has tended to be more uniform under the new tax law than under the general property tax. Also, as is to be suspected from the reduced burden on the landowners, there has been a reduction in funds available to the counties.

Obstacles to Implementation of a Productivity Tax in Virginia

It becomes obvious that if ad valorem property taxation is harmful to forest management objectives generally, the productivity tax approach is an attractive alternative. However, there could be four main obstacles to implementation of such a tax in Virginia. The first and most serious, would be to convince the legislature that forestry has special problems which require special treatment. A second problem facing implementation is that Section 168 of the Virginia Constitution requires uniform taxation; which the courts and the Department of Taxation feel implies general property taxation. These agencies must be convinced that the productivity tax puts forests on the same tax basis as most other properties are presently. A third problem which must be faced is the possible shifting of the tax burden onto other properties, or the possible reduction of revenues. A fourth problem, stemming from the third, would be how to keep the possible decline in county revenues from affecting the quality and quantity of public services available within the county. This problem would be especially serious in counties which have a majority of the land area in commercial forest land.

It was previously noted that the productivity tax is the only alternative to the general property tax, among those discussed, which meets the standard of equity established for forest property taxation. The productivity tax is the only suitable alternative because it is the only one which taxes forest land, not timber and land; and which taxes the land based on income (timber) producing potential. It must be remembered that this feature was a keystone of the equity definition.

SUMMARY AND CONCLUSIONS

The major objective of this study was to determine the Virginia forest property tax situation with respect to equity and possible influences on forest land management. In order to accomplish this objective, it is necessary to review and summarize the theoretical aspects of ad valorem forest property taxation and to describe the actual forest property tax situation in Virginia.

A tax was defined as "a compulsory payment...for the support of a government." The general property tax is based on payment of a portion of the value of property as taxes and is the financial mainstay of many local governments. The general property tax covers real property and tangible personal property. The tax on real property is of primary interest to forest landowners.

Property taxation contains five basic procedural steps, assessment, budgeting, setting the tax rate, billing the taxpayer, and dealing with delinquency. To the forest landowner, assessment is the most important step.

Equity in property taxation was defined as reducing the annual net income of all parcels within a taxing unit by a common percentage. In relation to this standard of equity it was shown that inequities in forest property taxation may occur in two ways, parcel bias and deferred yield bias. Parcel bias is a symptom of poor assessment practices, while deferred yield bias results from double taxation of deferred yield investments such as forest land.

As commonly applied, the general property tax is a variable cost of

forest production. Therefore, the management effect of this tax is dynamic; that is, changes in taxes will result in different management programs being optimal.

The actual forest property tax situation in Virginia was discussed in relation to the legal and procedural requirements for such taxation. The Virginia forest property tax does not differ significantly from the general property tax. Therefore, the possibility for parcel and/or deferred yield bias is present in Virginia forest taxation.

The Constitution of Virginia requires uniform taxation, which is interpreted to imply the general property tax for forest taxation. However, alternatives to the general property tax have been proposed for forest lands. There are a number of obstacles to changing the Virginia forest property tax, nevertheless, a number of the alternatives were examined. From the standpoint of equitable taxation, the productivity tax is the most attractive alternative.

Two primary conclusions were drawn from the study. First, the general property tax as applied to forest lands, contains inherent possibilities for inequitable taxation. Inequitable taxation can result from parcel bias and/or deferred yield bias. The generally recommended cure for parcel bias is better informed assessors.

Since deferred yield bias is common only to deferred yield properties, such as forests, its cure depends on the proper taxation of such properties. Such taxation should be based on an equal reduction of annual net income or equivalent annual net income.

The second conclusion is, that, since the property tax is generally

a variable cost of timber production, the tax has a dynamic effect on forest management. The forest property tax in Virginia does function as a variable cost; therefore, private forest management decisions in Virginia cannot be independent of the forest property tax.

The Virginia forest property tax situation definitely creates an atmosphere for forestry to receive inequitable treatment. Possible cures for such treatment have been suggested; however, whether or not Virginia forest lands are inequitably taxed cannot be definitely determined by the present study. All this study can do is state that a situation conducive to inequitable taxation of forest land exists in Virginia. Additional studies are needed to determine if such inequity does exist and, if so, at what level. Necessary future study logically falls into two areas.

1. Empirical studies of Virginia forest property taxation to determine the existence and magnitude of inequity in such taxation.
2. If studies in area (1) do indicate inequitable taxation of forest property, studies to develop an equitable forest tax law for Virginia should be initiated. Within this area of research, the possibility that the uniform taxation provision of the Virginia Constitution does not restrict forest property taxation to the general property tax should be explored.

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APPENDIX

Cited Sections of the Virginia Constitution

SECTION 168. Taxable Property; Taxes Shall be Uniform as to Class of Subjects and Levied and Collected Under General Laws.-- All property, except as hereinafter provided, shall be taxed; all taxes, whether State, local or municipal, shall be uniform of the authority levying the tax, and shall be levied and collected under general laws. The General Assembly may define and classify taxable subjects, and, except as to classes of property herein expressly segregated for either State or local taxation, the General Assembly may segregate the several classes of property so as to specify and determine upon what subjects State taxes, and upon what subjects local taxes may be levied.

SECTION 169. How Property Assessed; General Assembly May Grant Cities and Towns Right to Reduce Taxation For a Period of Years on Land Added to Corporate Limits.--Except as hereafter provided, all assessments of real estate and tangible personal property shall be at their fair market value, to be ascertained as prescribed by law. So long as the State shall levy upon any public service corporation, other than a railway or a canal corporation, a State franchise, license, or other tax, based upon or measured by its gross receipts, or gross earnings, or any part thereof, its real estate and tangible personal property shall be assessed by the State Corporation Commission, or other central State agency, in the manner prescribed by law. The General Assembly may allow a lower rate of taxation to be imposed for a period of years by a city or town upon land added to its corporate limits, than is imposed on similar property within its limits at the time such land is added.

SECTION 171. Real Estate and Tangible Personal Property, except the Rolling Stock of Public Service Corporations, Segregated for Local Taxation Exclusively.--No State property tax for State purposes shall be levied on real estate or tangible personal property, except the rolling stock of public service corporations. Real estate and tangible personal property, except the rolling stock of public service corporations, are hereby segregated for, and made subject to, local taxation only, and shall be assessed or reassessed for local taxation in such manner and at such times as the General Assembly has heretofore prescribed, or may hereafter prescribe, by general laws.

Cited Sections of the Code of Virginia

SS 59-760. What Real Estate to be Taxed.--All real estate, except such as is exempted by law, shall be subject to such annual taxation as may be prescribed by law. (Code 1919 SS 2271, p. 589; 1928, p. 170; 1930, p. 872; 1938, p. 426; 1940, p. 665; Tax Code, SS 251.)

SS 58-778. In Counties of More Than Two Thousand Population Per Square Mile.--There shall be such general reassessment in the year nineteen hundred fifty and at least every fourth year thereafter in each county having a population of more than two thousand inhabitants per square mile. (1944, p. 113; 1946, p. 604; Tax Code SS 242; 1950, p. 10.)

SS 58-780. In Counties of Twenty-one Thousand or More; Generally and When Assistance of Department Used in Last Reassessment.--There shall be a general reassessment of real estate in the year nineteen hundred fifty-one and every sixth year thereafter in each of the counties of this Commonwealth containing twenty-one thousand or more population according to the United States census of nineteen hundred forty; but, if any such county utilized the assistance of the Department of Taxation in its last general reassessment of real estate, there shall be no general reassessment of real estate in such county in the year nineteen hundred and fifty-one and the next general reassessment of real estate therein shall be in the sixth year after the last general reassessment, and subsequent general reassessments therein shall be in every sixth year thereafter.

Provided, governing bodies of counties containing twenty-one thousand three hundred but less than twenty-one thousand five hundred population, and of counties containing more than twenty-six thousand six hundred seventy but less than twenty-six thousand eight hundred population, shall require such reassessment during the year nineteen hundred fifty-four but may permit the reassessment to be completed in nineteen hundred fifty-five, if it appears that it cannot be completed in nineteen hundred fifty-four, provided, this amendment shall not have the effect of postponing subsequent general reassessments. (1946, p. 604; Tax Code, SS 242; 1950, p. 1266; 1954, cc. 480, 493.)

SS 58-782. In Counties of Less than 21,000 Which Reassessed in 1947 or 1948 Without Assistance of Department; in Counties Which Reassessed in 1946 With Such Assistance.--There shall be a general reassessment of real estate in the year nineteen hundred fifty-two and every sixth year thereafter in each of the counties of this Commonwealth contain less than twenty-one thousand population according to the United States census of nineteen hundred forty that had a general reassessment of real estate in the year nineteen hundred forty-seven or nineteen hundred forty-eight in which the assistance of the Department of Taxation was not utilized; and in addition, there shall be a general reassessment of real estate in the year nineteen hundred fifty-two and

every sixth year thereafter in each of the counties of this Commonwealth that had a general reassessment of real estate in the year nineteen hundred forty-six in which the assistance of the Department of Taxation was utilized. (1946, p. 604; Tax Code, SS 242; 1950, p. 1266.)

SS 58-783. In Counties of Less Than 21,00 Which Reassessed in 1949 Without Assistance of Department; Counties Which Reassessed in 1947 With Such Assistance.--There shall be a general reassessment of real estate in the year nineteen hundred fifty-three and every sixth year thereafter in each of the counties of this Commonwealth containing less than twenty-one thousand population according to the United States census of nineteen hundred forty than had a general reassessment of real estate in the year nineteen hundred forty-nine in which the assistance of the Department of Taxation was not utilized; and in addition, there shall be a general reassessment of real estate in the year nineteen hundred fifty-three and every sixth year thereafter in each of the counties of this Commonwealth that had a general reassessment of real estate in the year nineteen hundred forty-seven in which the assistance of the Department of Taxation was utilized. (1946, p. 604; Tax Code, SS 242; 1950, p. 1266,)

SS 58-784. Counties of 17,000 or More Which Reassessed in 1948 With Assistance of Department; Similar Counties of Less Than 17,000; Counties That Reassessed in 1949 With Such Assistance; Counties That Reassessed in 1950.--There shall be a general reassessment of real estate in the year nineteen hundred fifty-four and every sixth year thereafter in each of the counties of this Commonwealth containing seventeen thousand or more population according to the United States census of nineteen hundred forty than had a general reassessment in real estate in the year nineteen hundred forty-eight in which the assistance of the Department of Taxation was utilized.

There shall be a general reassessment of real estate in the year nineteen hundred fifty-five and every sixth year thereafter in each of the counties of this Commonwealth containing less than seventeen thousand population according to the United States census of nineteen hundred forty that had a general reassessment of real estate in the year nineteen hundred forty-eight in which the assistance of the Department of Taxation was utilized; and in addition, there shall be a general reassessment of real estate in the year nineteen hundred fifty-five and every sixth year thereafter in each of the counties of this Commonwealth that had a general reassessment of real estate in the year nineteen hundred forty-nine in which the assistance of the Department of Taxation was utilized.

There shall be a general reassessment of real estate in the year nineteen hundred fifty-six and every sixth year thereafter in each of the counties of this Commonwealth that had a general reassessment of real estate in the year nineteen hundred fifty. (1946, p. 605; Tax Code, SS 242; 1950, p. 1267.)

SS 58-784.3. Reassessment by Direction of Governing Body.--Notwithstanding any other provision of this article to the contrary, there may be a general reassessment of real estate in any county in any year if the governing body so directs by a majority of all the members thereof, by a recorded yea and nay vote. (1950, p. 1267.)

SS 58-785. Provisions for Annual Assessment Not Repealed.--Nothing contained in this article shall be construed as repealing or amending any provisions of law authorizing or permitting the annual assessment or reassessment of real estate in cities or counties, except as hereinafter expressly provided. (1934, p. 26; 1936, p. 56; 1944, p. 114; 1946, p. 606; Tax Code, SS 242, 242b; 1948, p. 355; 1950, p. 1267.)

SS 58-787. By Whom Made in Counties.--Every such general reassessment of real estate in a county shall be made by such person or persons, or officer or officers, as designated for that purpose by the circuit court of the county, or by the judge in vacation. (1930, p. 870; 1932, p. 118; 1934, p. 25; 1936, p. 55; 1944, p. 114; 1946, p. 605; Tax Code, SS 242.)

SS 58-788. Compensation of Assessors.--The compensation of such person or persons, or officer or officers, in cities shall be prescribed by the governing bodies of the cities, respectively. The compensation of such person or persons, or officer or officers, in counties shall be prescribed by the governing bodied of the counties, respectively, and shall be paid out of the county treasuries. (1930, p. 870; 1932, p. 118; 1934, p. 25; 1936, p. 55; 1944, p. 114; 1946, p. 605; Tax Code, SS 242.)

SS 58-789. Qualifications of Assessors; Removal and Appointment of Substitute.--The persons appointed under the authority of this article shall be freeholders in the courty or city for which they serve, and shall be selected by the court or judge from the citizens of the county or city. If at any time the court, or judge in vacation, is satisfied that any assessor appointed under this article will not, or from any cause cannot, perform the duties devolved on him, the court, or judge in vacation, may wholly supersede him and appoint another in his place. The provisions of this article as to the appointment or removal of assessors shall apply to any appointments heretofore or hereafter made. (1934, p. 26; 1936, p. 55; 1944, p. 114; 1946, p. 605; Tax Code, SS 242.)

SS 58-790. Assessment of Values and Notation Whether Owner White, Colored, or Indian.--The person or persons, or officer or officers, designated under the provisions of this article shall, as soon as practicable after the first day of January in the year for which they are appointed to serve, proceed to examine all lands and lots assessable by him, or them, with the improvements and buildings thereon, within

his or their city or county, and shall, upon examination, ascertain and assess the fair market value thereof, and at the same time shall note whether the owner is white, colored, or Indian as defined by SS1-14 of the Code. (Code 1919, SS 2244; 1920, p. 34; 1924, p. 409; 1928, p. 169, 1349; 1930, p. 871; 1932, p. 119; Tax Code, SS 244; 1958, c. 314.)

SS 58-791. Original Reassessment Filed in Clerk's Office; Copies to Commissioner of the Revenue and Local Board of Equalization; Recapitulation Sheets to Department.--As soon as the person or persons, or officer or officers, designated under the provisions of SS 58-786 and SS 58-787 shall have completed the reassessment in his or their city or county, he or they shall make two copies thereof, in the form in which the land books are made out, and shall certify on oath that no real estate assessable by him or them is omitted and that there are no errors on its face. Such person or persons, or officer or officers, designated as aforesaid shall file the original of such reassessment in the office of the clerk of the court of the city or county in which deeds are admitted to record, who shall preserve the same in his office; and he or they shall deliver one copy of such assessment to the commissioner of the revenue of the city or county and one copy to the local board of equalization of such city or county. In cities having an additional court for the recordation of deeds, one extra copy of such reassessment, embracing real estate the conveyance of which is required to be recorded in the clerk's office.

Such person or persons, or officer or officers, shall also at the same time forward to the Department of Taxation a copy or the recapitulation sheets of such reassessment. (Code 1919, SS 2247; 1928, p. 170; 1930, p. 871; 1932, p. 119; 1946, p. 345; Tax Code, SS 247.)

SS 58-792. Completion of Work; Extension.--In every city and county the person or persons, or officer or officers, making such reassessment shall complete the same and comply with the preceding section not later than December thirty-first of the year of such reassessment. But the judge of any court in the clerk's office of which the original of such reassessment is required to be filed may, for good cause, extend the time for completing such reassessment and complying with such section for a period of not exceeding four months from the thirty-first day of December of the year of such reassessment. (1930, p. 345; Tax Code, SS 247.)

SS 58-794. Department of Taxation to Render Assistance.--The Department of Taxation, upon the request of the governing body of any county or city, or town shall render advisory aid and assistance in making any general reassessment of the real estate in such county or city, or town. (1946, p. 606; Tax Code, SS 242; 1956, c. 219.)

SS 58-795.1. General Reassessments of Real Estate in Counties and Cities; Appraisals; Procedure.--(a) In any year in which a general reassessment of real estate in any county or city is to be made, the State Department of Taxation within the limits of such appropriation as may be made therefro, shall make an appraisal of the real estate in such county or city if the Department does not have available to it sufficient information to determine accurately the values of such real estate. After completing the appraisal, the Department of Taxation shall make the same available to the governing body of the county or city for such use as the governing body deems proper.

(b) Subject to the provisions of subsection (c), the values thus arrives at by the Department of Taxation shall be used along with the estimated true values of other locally taxable property and the levy projected and as the basic data for the purpose of determining eligibility of the county or city to share in any State equalization fund.

(c) After the completion of a general reassessment in any county or city, such county or city may inform the Department as to any incorrect appraisals made by the Department of Taxation. The Department of Taxation, in consultation with such governing body or some person designated by either or both, shall have authority to adjust to a proper figure the values shown in the original appraisal. If the Department and the governing body cannot agree as to the values shown in the original appraisal the data shall be submitted to three persons selected as follows: One appointed by the Commissioner of the Department of Taxation, one appointed by the governing body and one appointed by the Governor. The decision of the tree persons so selected as to such values shall be final. The adjusted values thus arrived at shall be used for the purposes spacificied in the preceding paragraph.

(d) The Provisions of this section shall not be applicable to any county or city having a permanent board of real estate assessors or a permanent real estate assessor appointed under a statute permitting the annual assessment or reassessment of real estate in such county or city; provided, however, that valuations of the real estate in such counties or cities by permanent local assessing offices shall be made by duly qualified personnel whose qualifications are approved by the State Department of Taxation.

(e) No part of the cost of any appraisal required to be made under this section for the purpose of determining eligibility to share in any State equalization fund shall be forn by or charged to the locality involved. (1950, p. 1268)

VITA

Glenn Herbert Manning, son of Anne E. Manning and Herbert L. Manning, was born in Hartford, Connecticut on November 10, 1940. He attended Blacksburg Elementary and High Schools after moving to Blacksburg, Virginia in 1948, and graduated from Blacksburg High School in 1959. He entered Virginia Polytechnic Institute in the fall of 1959, and graduated with a B.S. in Forestry in 1963. He worked for the U. S. Forest Service, Gifford Pinchot National Forest, Willard, Washington for six months, and in February 1964 entered the graduate school of Virginia Polytechnic Institute as a candidate for the M. S. degree in Forestry. He is a member of Xi Sigma Pi, forestry honor society.


Glenn Herbert Manning

ABSTRACT

of

THE FOREST PROPERTY TAX SITUATION IN VIRGINIA

by

Glenn Herbert Manning

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ABSTRACT

The principle objective of this study was to determine whether the Virginia property tax, as it is applied to forest lands, may have harmful effects on forest management in Virginia. In order to accomplish this objective, an investigation was made of the theoretical aspects of the general property tax as applied to forest land, including a definition of tax equity as applied to forest taxation. Next, the property tax situation in Virginia, specifically as related to forest lands, was investigated.

The usual situation of the general property tax as applied to forest lands was found to produce two serious equity faults, deferred yield bias and parcel bias, which could be harmful to forest management. It was also inferred that the general property tax is a variable cost as applied to forestry, and as such, influences management decisions.

When the Virginia property tax situation was compared to the general case, it was found that the situations were not substantially different. Alternatives to the general property tax on forest land were discussed. It was decided that only the productivity tax meets the defined standard of equity.

It was concluded that the forest tax situation in Virginia will allow the faults which are found in the general property tax situation to occur in Virginia. The effects of the presence of these faults in the Virginia situation and the magnitude of these effects were two subjects which were left for future study. It was felt that a firm

understanding of the nature of these faults in the general property tax was prerequisite for further studies. Thus, in order to determine the actual effects of the Virginia real estate tax on forest management decisions future intensive study is necessary.