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Student Loan Programs for Higher Education . . . Part 1.

Loan programs have succeeded in helping many students meet college expenses. However, because of an insufficient supply of funds, private institutions have often had to ration their loans. The result has led to discrimination against a significant number of students from low income families.

A New England Forest Problem

In recent years a new ownership trend has emerged in a considerable portion of the region's woodlands. The new owners, largely commuters and summer residents, like to preserve the woodlands in their natural state. However, if they permitted controlled cutting, many benefits would ensue.

NEW ENGLAND BUSINESS REVIEW

Student Loan Programs for Higher Education . . . Part 1

by J. Philip Hinson

RISING student costs as well as popular support for the idea that all qualified students should be able to attend college have encouraged the U. S. Congress to authorize two student loan programs during the past 10 years. One program provides Federal loan funds to schools who in turn lend to students on the basis of financial need. The second, a guaranteed loan program, permits students to borrow directly from private financial institutions.

To see how these two plans are operating and whether needy students are in fact receiving loans, this Bank conducted a survey of 300 New England lending institutions. The results of this survey and other research studies indicate that the Federal programs have succeeded in extending a large number of loans to students from low income families. However, since the supply of loans has been insufficient to meet the demand, the lenders under the guaranteed loan program have had to devise methods for allocating their funds. One widely used method is to select only those applicants who have had previous customer relations with the lender — for example, those who have maintained a checking or savings account. Since students in greatest need are the least

likely to have had ties with financial institutions, this criterion for lending appears to have resulted in discrimination against a significant number of students from low income families.

The Cost and Growth of Higher Education

The sharp rise over the past 10 years in direct student charges for higher education is shown in Table I. In the past, educational costs affected primarily upper middle income families whose children accounted for the great majority of college students. In recent years, however, the proportion of lower income students attending college has increased, and the problem of meeting the costs of higher education has intensified.

Moreover, the U. S. Office of Education anticipates a 50 percent increase in enrollment from 6 million in 1966 to 9 million in 1975, a percentage increase far greater than that of population growth. Yet this increase of 4 percent annually is less than half the 9 percent yearly rise projected for total college

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Table I
Average Basic Cost* Per Student
in Higher Education
1957-58 and 1967-68 School Years

	Public 4 Year Colleges	Private 4 Year Colleges
1957-58	\$ 770	\$1345
1967-68	1110	2266

*Basic education cost is defined as the total amount paid for tuition, fees, board and room. Other costs such as travel, books, clothing and entertainment are excluded.

Source: U. S. Department of Health, Education and Welfare, Office of Education, *Digest of Educational Statistics, 1967.*

and university operating costs. Together, these figures suggest a sharp rise in the cost per student in the coming years.

Student Loan Programs

To help ease the burden of higher education on lower income families the Federal Government began to participate in student loans with the passage of the National Defense Education Act of 1958 (NDEA). Title II authorized Federal funds for low interest loans to students who established financial need. Under this plan, which is still operating, funds are distributed to each state which, in turn, allocates them among colleges and universities willing to provide additional matching funds equal to 1/9 of their Federal receipts. Students are permitted to borrow up to \$1000 per year, with college financial officers determining the amount for which each applicant qualifies. The loans are interest free while the student remains in school. Upon graduation, interest is charged at a simple annual rate of 3 percent on the unpaid balance. Repayment may be stretched out for 10 years, with extensions allowed for postgraduate education or duty in the armed services. Further, up to one-half

of the principal is forgiven those entering elementary or secondary teaching as a career.

In retrospect, it is clear that the demand for this type of student aid had been widely underestimated. No sooner was the program operative in 1959 than schools found themselves faced with requests for these loans that far exceeded their supply. Congress responded by appropriating ever larger sums for the program each year, but the demands for these funds grew even faster with the result that increasingly large numbers of students were unable to borrow, or to borrow as much as needed. The dramatic growth of the NDEA loan program from its inception through fiscal year 1967 is shown in Table II.

Under the Higher Education Act (HEA) of 1965 the Federal Government established a new student loan program with entirely different administrative procedures. This program relies on private financial institutions to extend

Table II
National Defense Education Act
Student Loan Program
Summary of Activity
Fiscal Years 1959-1967

Fiscal Year	Number of Loans	Amount Borrowed (in Thousands)
1959	24,831	\$ 9,502
1960	115,450	50,152
1961	151,068	70,963
1962	186,465	89,109
1963	216,930	103,732
1964	246,930	127,100
1965	319,974	153,900
1966	377,448	216,600
1967 (est)	394,359	218,000
	<u>2,033,455</u>	<u>\$1,039,058</u>

Source: College Entrance Examination Board, *A Study of Federal Student Loan Programs.*

the loans directly to students and permits the lenders to secure guarantees on funds advanced for this purpose. While the old and new plans are now operating simultaneously, many supporters of the HEA program believe that it should ultimately replace the older NDEA plan.

The HEA had its origins in the earlier attempts of a number of individual states to provide loan aid for higher education to their own residents. The earliest of these plans dates back to 1956 when the private nonprofit Massachusetts Higher Education Assistance Corporation was founded. Under the plan, students borrowed directly from private lending institutions, and the latter then registered the loan with this agency to secure a partial guarantee of the principal against default.

By 1965 a total of 17 states had developed their own variants of the Massachusetts program, and a private nonprofit corporation (United Student Aid Fund, Inc.) had been established to offer its version of the plan on a nationwide basis. These organizations pioneered in developing methods for operating loan funds and enabled many students from low income families to acquire a higher education. Unfortunately, however, in many states funds fell short of the amounts needed.

At this same time the possibility of state operated loan plans had become attractive to the Federal Government on a number of counts. In most cases state loan programs had been efficiently run, and the Congress was sympathetic to the idea of letting individual states and private enterprise assume leadership in this area. Moreover, the Administration saw the possibility of a number of appropriation

cuts by substituting state and private lending for the Federal NDEA program. These savings were largely illusory, of course, because in the long run the NDEA funds are repaid by students. And, in any case, the real resource cost to society is largely the same regardless of who runs the program. Nevertheless, these considerations combined to prompt the adoption of the guaranteed loan program as expressed in the HEA of 1965.

The program requires a four-way cooperation between the Federal government, the state agencies, private financial institutions, and the students themselves. The terms of the Act provided Federal financial support for state guaranteeing agencies where they existed, and encouraged the remaining states either to establish one or to contract the function out to a private organization such as USAF. In states that take no action to establish the program, or that run out of guarantee reserve funds, the Federal Commissioner of Education is authorized to act directly as the guarantor to the lender. Federal support to date has consisted of an initial \$17½ million in long-term loans to states to supplement their reserve funds, with an additional \$10 million for the same purpose currently before Congress.

As in the Massachusetts program already described, the actual HEA loans to students are provided by private lenders, with commercial banks, savings institutions, credit unions, pension funds and other institutional lenders all free to participate. Each loan is registered with the administering agency for the state, which certifies the student's registration at an accredited institution and issues a guarantee of at least 80 percent of principal to the lender in case of default.

Table III
Loan Activity Under the Higher Education Act of 1965
(June 1, 1966 to December 31, 1967)

	Number of Loans		Amount of Loans		Number of Loans
	Actual	As a per cent of U. S. total	In Millions	As a per cent of U. S. total	As a per cent of student residents*
Conn.	22,368	3.5%	\$ 24.1	4.6%	10.0%
Maine	5,408	0.8	4.3	0.8	7.2
Mass.	26,049	4.0	22.3	4.2	5.9
N. H.	2,723	0.4	2.4	0.5	7.0
R. I.	4,627	0.7	4.2	0.8	10.0
Vt.	1,699	0.3	1.5	0.3	8.3
New Eng.	62,874	9.7	58.8	11.2	7.7
U. S.	646,000	100.0	525.0	100.0	4.7

*Figures are for July-October, 1967 and therefore show a smaller proportion of student residents receiving loans than have actually borrowed under the program during its 2 years of operation.

Source: U. S. Department of Health, Education and Welfare, Office of Education, and College Entrance Examination Board, *A Study of Federal Student Loan Programs*.

Students are expected to borrow in the community of their home residence, and may borrow any amount subject to the maximum limits of \$1500 per year for graduate students, \$1000 per year for undergraduates, and \$7500 total for any one person. To qualify as participants in the Federal plan, lenders cannot charge more than 6 percent simple annual interest and furthermore must allow repayment to extend for a substantial period — 10 years, or more in case of Army service or other similar circumstances.

Although any student, regardless of his family income, may borrow under this program, an element of subsidy is provided for the great majority of American families with college-aged children. If the *net taxable income** of the stu-

dent's family is less than \$15,000, the Federal government will pay the entire 6 percent interest bill while the student is in school, and one-half of it during the years of repayment. As an example of the liberality of these provisions, a family of four with a gross income of \$19,333 or less would be eligible for the interest benefit.

Operation at the State Level

While the Federal role in initiating and subsidizing the program is important, state cooperation is also needed for its smooth operation. A comparison of loan activity by state gives some indication of the relative performance at this level. Of the 646,000 loans totaling \$525 million made nationwide during the first 16 months of HEA's operation, 63,000 were made in New England. (It should be noted that one student borrowing, for example, in 2 successive years would account for two loans so that the number of students involved

*For these purposes net taxable income is defined as the amount reported on line 11d of the Federal 1040 tax form when a 10 percent standard deduction is taken — i.e., gross income less all business and personal exemptions. This does not necessarily coincide with the figure reported for income tax purposes as the individual is free in the latter case to use alternate methods in calculating deductions.

in these figures is considerably less than the number of loans.)

The number of borrowers for each New England state and the Nation as a percent of student residents and the dollar amounts they received are shown in Table III. The data show that each New England state has made a greater number of loans per student resident than the national average. Only two states — New York and North Dakota — have a better record by this measure than Connecticut and Rhode Island, the region's best performers. Only seven have done better than Massachusetts, the lowest state in the New England rankings.

The most common barrier to rapid expansion at the state level has proved to be, not surprisingly, a budgetary one. Funds are needed for operating expenses and for the reserve fund from which defaults are paid as they arise. In most states operating costs are partially defrayed by charging a small fee on each loan.

Practice varies widely, however, among the states in the funding of their guarantee reserves as well as in the forms of the administering agencies. States have variously: set up their

own agencies; left the program to private, nonprofit organizations; contracted with the United Student Aid Fund to administer the plan; or taken no action at all. In the 16 cases where no state plan has been initiated, the U. S. Office of Education has stepped in to provide a program through the USAF. Because of this great administrative diversity, the guarantee funds in any given state consist of Federal advances or some combination of these and state, private, and USAF funds.

Regardless of the composition of a reserve fund, its size and the fractional reserve requirement limit the amount of loans that can be made within the state. At one point two New England states — Maine and Vermont — had no remaining free reserves with which to guarantee new loans; 16 other states have at one time or another faced similar conditions. Although in both New England cases the program has started again, the threat of running out of reserve funds has restrained promotion of the program to some extent in nearly all states. Recently however, legislation for a 4 to 1 Federal re-insurance scheme has been proposed by the Administration, and Congressional passage this session seems likely. (See Box on page 11.) Such legislation will permit

Table IV
Characteristics of Borrowers Under the Higher Education Act:
Sex and Race, New England and the United States

	Males as a Percent of:		Ratio of	Nonwhites as a Percent of:		Ratio of
	Borrowers (1)	College Age Pop. (2)	Columns 1 to 2 (3)	Borrowers (4)	College Age Pop. (5)	Columns 4 to 5 (6)
New Eng.	65.7%	50.7%	1.3	2.3%	2.4%	1.0
U. S.	65.1	50.7	1.3	5.9	12.2	.5

Source: U. S. Department of Commerce, Bureau of the Census, 1960 *Census of Population*, and U. S. Department of Health, Education and Welfare, Office of Education data, based on the first 387,931 loans.

Table V
Characteristics of Borrowers Under the Higher Education Act:
Income, New England and the United States

	Per Cent of Borrowers from Families with a Net Taxable Income* of:			
	\$0-\$4,999	\$5,000-\$9,999	\$10,000-\$14,999	\$15,000 and over
Conn.	11%	39%	47%	3%
Maine	21	50	27	1
Mass.	16	42	39	2
N. H.	23	45	31	1
R. I.	20	49	30	1
Vt.	32	53	15	0
New Eng.	16	42	40	2
U. S.	24	42	32	1

*Net taxable income as defined in the footnote on page 5.

Source: U. S. Department of Health, Education and Welfare, Office of Education data, based on the first 387,931 loans.

each state to expand substantially both the number and amount of its loans.

The Borrowers

Such an expansion will be welcome since the demand for student loans has increased rapidly. During the first full year of HEA operation 329,000 students borrowed \$248 million under the program. About 1 million loans amounting to \$800 million were expected to be on the books as of July 1968. Moreover, the U. S. Office of Education projects an aggregate demand of \$2.4 billion by July 1969, and \$9.2 billion by July 1973.

To see which student groups have had the easiest access to the program, the first 387,000 loans nationwide were classified by such borrower characteristics as sex, race, and income class. The data (Table IV) show that males receive a slightly larger share of loans than their relative numbers alone warrant. This disproportion is likely explained by the tendency of males to stay in school longer than females. The analysis also shows that nonwhites bor-

row at about twice the relative frequency in New England that they do elsewhere. Among the possible reasons for this differential are the higher levels of income and education of the nonwhite adults in the region, and therefore, the higher aspirations and ability of their children to go to college when compared with nonwhites in other areas.

The distribution of these same loans by family income class of student recipients is shown in Table V. Financial institutions in New England — particularly in Connecticut and Massachusetts — have made a larger proportion of their loans to high income families than has been true nationally. Undoubtedly, as in the case of New England nonwhites, the regional figures reflect the above average educational and income levels of the adults in the region. In addition, higher incomes may also mean that the borrowers are willing to take on more debt. Finally, tuition and related charges at New England schools may be higher on the average than they are in other regions.

Table VI
Comparison of Family Income Levels:
The Guaranteed Loan Program and the National Defense Student Loan Program

Guaranteed Loans (Reported and Processed by December 1967)		National Defense Student Loans		
Gross Family Income*	Per Cent of Borrowers (287,000)	Gross Family Income	Per Cent of Borrowers 1966 (377,000) 1967 (394,000)	
\$ 0- 2,999	12% } 32%	\$ 0- 2,999	23% } 54%	23% } 52%
3,000- 5,999	20 } 51%	3,000- 5,999	31 } 40%	29 } 42%
6,000- 8,999	26 }	6,000- 7,499	18 }	17 }
9,000-11,999	25 }	7,500-11,999	22 }	25 }
12,000-14,999	16 }	12,000-14,999	4 }	4 }
15,000 and over	1 }	15,000 and over	2 }	2 }

*The great majority of borrowers are believed to have reported gross income figures. However, some net taxable income figures, as defined in the footnote on page 5, may be included.

Source: College Entrance Examination Board, *A Study of Federal Student Loan Programs*.

A comparison of the income levels of the recipients under the two Federal loan plans shows some significant differences, which may be particularly important in the light of the proposed replacement of the HEA guaranteed loan plan for the older NDEA direct loan program. Of course the two plans were from the beginning intended to serve different groups. NDEA emphasizes need and is aimed primarily at lower income groups. The HEA, on the other hand, is meant to make loans available for the great majority of students and it specifically directs lenders not to deny funds on the basis of relative lack of need to families with net taxable incomes of less than \$15,000.

Table VI shows the differences in the borrowing patterns under the two plans up to the beginning of this year. Under the NDEA, more than half the loans went to families with income under \$6,000. In contrast, less than a third of the loans made under HEA went to families in this income group. The HEA plan provided 16 percent of its loans to families at middle income levels (between \$12,000 and \$15,000)

as compared with only 4 percent under NDEA. These figures appear to suggest some shift of loan funds away from the neediest groups under the HEA program.

Variations in the average loan size also indicate which groups are borrowing most under the HEA program. Both the United States and New England data show that the average loan to Negroes was significantly smaller than to whites. (See Table VII). This difference can be partially explained by a relatively higher proportion of Negro enrollment in less expensive public and private colleges.

In addition, Table VII shows that almost without exception the amount borrowed was found to rise with the income of the borrower. This relation holds even when income classes of \$20,000 and \$25,000 are considered. Taking the United States as a whole, the typical student from a family with net taxable income of \$20,000 or more borrows 23 percent more than the overall average while the student from a family with net taxable income of \$3,000 or

under tends to borrow 5½ percent less. Approximately the same pattern holds in New England although the variation is less extreme.

On the basis of this Bank's survey, the average loan was also found to have a significant relationship to community median income and population per square mile. When all other factors are held constant, the average loan tends to be largest in rural areas and declines as population per square mile increases. On the other hand, again with everything else being equal, the wealthier the area, the larger the average loan tends to be. Thus, in cities with high population density and low community income, average loan size tends to be small.

The number of loans made by an institution (adjusted for its size and the length of time it has participated in the program) shows approximately the same relationship as the average loan to income and population density, so that in low-income, urban communities this number tends to be comparatively low. In these same areas the lender participation rate also appears to be somewhat below average. These combined factors, while offering no proof, raise the question of whether a student from a core city

will have unusual difficulty in obtaining a loan in the amount needed. Similarly, the tendency of the more prosperous students to borrow larger amounts, as well as the higher income levels of the borrowers under the HEA plan, suggest that loan funds may be shifting away from the neediest students. Of course, this conclusion can only be reached if supply shortages exist. If loans were available to all applicants without restriction, there would be no need for rationing among students.

In fact, abundant evidence indicates that this program has been plagued by widespread shortages with many applicants being turned away. In this Bank's survey lenders were asked whether the demand for these loans at their institution had exceeded their willingness or ability to supply them. Twenty-seven percent answered yes, and another 32 percent stated that the quantity demanded had been kept within supply levels only by imposing restrictions on the eligibility of borrowers. Only 42 percent of the institutions gave an unqualified no.

An analysis of these replies shows that the excess of demand over supply appears most

Table VII
Comparison of Average* Loans by Income Level and Race,
New England and the United States

Average Loan Received by:	New England	United States
All Borrowers	\$ 869.77	\$748.81
Whites	872.08	767.23
Negroes	808.96	639.48
Students from families with incomes** of less than \$3,000	867.24	708.11
Students from families with incomes** between \$9,000-\$12,000	867.01	776.11
Students from families with incomes** of \$20,000 or more	1,022.64	920.81

*Average indicates arithmetic mean.

**Net taxable income as defined in the footnote on page 5.

Source: U. S. Department of Health, Education and Welfare, Office of Education data, based on first 387,931 loans.

frequently in Massachusetts among the New England states, and is more severe at commercial banks than at other types of lenders. In addition, the gap generally becomes more apparent the larger the deposit size of the lender, the higher the community income level, and the more densely populated the area. In the most highly urban areas, the gap may be the result of the somewhat lower proportion of institutions making educational loans, while in the upper income communities, the explanation may be higher demand — that is, the tendency for almost all students to attend college.

The allocation problem which arises from these shortages constitutes one of the most undesirable features of the guaranteed loan plan as it now stands. Unlike the NDEA loan program, which relied upon legislative strictures as well as the advice of professional college financial officers in the selection of recipients, the HEA program provides no specific criteria and places this socially important allocation function squarely in the hands of the private lenders.

To find out how this process has worked in New England, the Bank survey polled participating lenders on their methods of allocating available funds. When asked whether the lender considered the applicant's financial need, 35 percent replied always, 42 percent replied occasionally, and 22 percent stated that as a matter of practice they gave it no consideration at all. While the frequency in the last category may seem high, it must again be pointed out that the Federal Act prohibits the consideration of need when applicants have less than \$15,000 in net taxable income.

When the respondents to this question were categorized in various ways, financial need

was found to be given least emphasis at large lenders, at savings and loan associations, and perhaps surprisingly, in highly urban areas with large percentages of nonwhite residents. It also receives relatively little attention in the wealthiest communities.

The answers also indicate that the lenders doing the most to direct their loans to the very needy (i.e., those with 50 percent or more of their student borrowers coming from families with incomes of \$5,000 or less) are *not* located in the highly Negro, highly populated areas. The evidence suggests that the ghetto youth, white or black, thus often faces both a relatively meager supply of loans and lending institutions that give his need little consideration. He would be most likely to succeed in getting a loan on the basis of his relative poverty if he could approach a lender outside his own community. This option, however, is not usually open to him, because students are encouraged to borrow in their own communities as a matter of general practice.

Another question provides some insight into the kinds of information lenders use to allocate loans. Reliance on the banker's own familiarity with the community is the source mentioned most often. Naturally, however, the banker's knowledge diminishes in larger urban areas, and in such places, lenders depend more heavily on information from other sources such as credit bureaus, and in some cases, college records.

Moreover, those institutions lending proportionately more to high-income borrowers tend to rely much less than usual on information from the colleges. The general conclusion emerges that the urban poor face more rigorous checks than any other single group. This ob-

REINSURANCE AND RESERVE FUND RATIOS

Presently the ratio of reserve funds to loans insured is determined independently by each state agency and ranges in New England from 3 to 8 percent. For a given state agency, thus, \$100 in reserve funds may permit insurance of anywhere from \$1,250 to \$3,333 in loans. Under the Federal "reinsurance proposal," presently being considered by the U. S. Congress, a state agency could obtain a Federal guarantee for \$4 of every \$5 of insurance issued against loans to private lenders. In practice, this proposal would mean that in the case of a default, a state agency could expect reimbursement of 80 percent of its loss from the Federal Government. Because of this provision, its effective guaranteeing capacity is multiplied by 5.

ervation points up a serious weakness of the HEA plan. In complete contrast to the NDEA program, the Higher Education Act does not even encourage, let alone require, the lenders to rely on any specific source of information. The neediest students would undoubtedly benefit if uniform standards were employed in the type and number of tests used by lenders.

When lenders were asked how they had allocated loan funds in situations where demand had exceeded supply (a point reached early in the program at many lending institutions), 21 percent replied that the applicant's degree of need was given some weight in selection, and another 21 percent replied that a first come, first served basis was normally used. However, an overwhelming 89 percent replied that they selected recipients by considering only those applicants who had had other customer relations with the bank in the past.* In most cases this requirement is construed to mean that the student or his parents must have had a checking or savings account with the bank for some specified length of time before the loan application is made. Unfortunately, this insistence that loans be restricted to past customers appeared somewhat more frequently in low income communities than in high, and was more prevalent as the nonwhite characteristics of the community increased.

*Respondents were allowed to choose more than one criterion on this question, with the result that these percentages add to more than 100.

In general then the social impacts of the HEA program have been mixed. On the positive side, the program has expanded rapidly and reached into all income classes. Further, there is no evidence of overt discrimination on racial or other grounds. The program, however, has been characterized by major supply shortages. Moreover, the marked tendency of the wealthy to borrow frequently, and in larger amounts, clearly suggests some displacement of those in greater need. And the variation in lender practices from one area to another has itself introduced an inequity, causing disparate treatment of students in otherwise similar circumstances merely through the accident of locale.

In large part these unfortunate results stem from the informal manner in which allocative procedures have developed among lenders. The widespread requirement of past customer relationships, for instance, cannot help but introduce an element of discrimination against the most impoverished and deprived of our citizens. It is precisely the slum dweller and welfare recipient who are least likely to have any established ties with a conventional financial institution. As a result, they may find themselves summarily excluded from borrowing for education while the suburban student whose father has used consumer-installment to purchase second cars and color televisions is placed at the head of the line.

Many of these problems would disappear if lenders were willing to commit large enough sums to this program. From their point of view, however, participation in the plan has raised a number of problems. Part 2 of this article will examine the degree to which lenders have participated, and discuss some of the proposals advanced on their behalf.

A New England Forest Problem

NEW ENGLAND is one of the most heavily forested regions in the United States. The proportion of land with a forest cover ranges from 63 percent in Connecticut and Vermont to 88 percent in Maine. For many reasons, however, most of the wooded land in Connecticut, Rhode Island and Massachusetts and much in Vermont and New Hampshire has little value for forestry or wildlife purposes at the present time. The rocky terrain and harsh winter climate raise logging costs and thereby reduce the value of standing timber. The region has been plagued by the problem of small ownerships that are expensive both to manage and to log. Woodlands in many small ownerships have been cut clear of all merchantable timber, leaving the trash species and defective trees standing. In the past these small holdings were usually owned by poor farmers who had a great need for current income and who, unlike the larger corporate owners, were likely to have trees cut as soon as they could be sold. In most cases this type of cutting hurt the productive capability of the forest.

During the last few decades in New England, a new ownership trend has emerged that has changed the situation significantly. Many farms and farm woodlots have been purchased by new owners. In fact, 70 percent of the total acreage of forest land in the three southern New England States is held in private noncorporate ownerships by persons who are not farmers.

The average size of an individual holding is about 50 acres.

Typically the new woodland owner is a city worker who commutes or a professional man or executive who has acquired land in the countryside primarily for recreational and aesthetic purposes. These owners generally do not have an intense interest in forestry or forest practices but use their land as a retreat from the pressures of city life or own it for speculative purposes. A majority of the new owners tend to be preservation-oriented. Unlike farmers, who are primarily interested in current income, the new urban owners are often opposed to timber cutting. They usually like to have the woodland stay in its natural state. At the present time less than 40 percent of the annual forest growth in New England is being cut.

This trend of events has its dangers. An unmanaged forest maintained in its "natural state" can be just as unproductive as a forest which is periodically cut clear of all timber. The tree species which become dominant in a natural forest often have no commercial value. In addition, even if the species are desirable, deformed and defective trees are likely to dominate an unmanaged forest. Finally, a forest allowed to grow and mature without any timber cutting becomes a biological desert. Game birds, deer, and wildlife that typically abound in a managed forest, are almost entirely absent from many of the woodlands in

southern New England. For these reasons the wood-using industries, professional foresters and wildlife management specialists of New England are much concerned about the attitudes of the new breed of forest owners.¹

Recently a very detailed study was made of the attitudes of these new forest owners by faculty members of the Forestry School at the University of Massachusetts. The results suggest that a fairly intensive public education program is needed if woodlands are to contribute significantly to the economy of much of southern New England.

The Study

The Massachusetts study was conducted in Berkshire County. This rural county is within easy reach of many cities and metropolitan areas in southern New England and New York, and a large proportion of the forest landowners are resident commuters. The study was made by mailing questionnaires to each private forest landowner in the county holding 3 or more acres of forest land with an assessed value of \$100 per acre or less. The findings were based on a 45 percent return of delivered questionnaires representing more than 1900 separate ownerships that in aggregate comprise 40 percent of the privately owned forest land in Berkshire County.

Characteristics of the Landowners

Most of the landowners were middle-aged or older with family responsibilities, good educations, and good incomes. Thirty percent were more than 60 years of age; 57 percent were over 50; only 17 percent were under 40.

¹For additional information on multipurpose use of forest lands, see the *New England Business Review* "Conflict of Freedom: Sportsmen and Land," July 1959 and "Multipurpose Management of Camp Lands," December 1960.

In addition, as the age of the owners increased so did the number of acres owned. As a group the woodland owners of Berkshire County were well educated. Almost half had studied beyond the high school level and about three-tenths had received one or more college degrees. In contrast, only 7.7 percent of the national population over 25 years of age has attended college for 4 or more years.

The higher-than-average education of forest owners was reflected both in their occupations and in their incomes. The three largest occupational groups were business owners or executives, professional and retired. These groups owned about half the county's woodland acreage. Farmers constitute only one-tenth of the total number of ownerships and 13 percent of the private forest acreage in the county. In contrast, in the United States as a whole, the farmers own about 40 percent of the privately owned forest.

The median family income of forest owners in Berkshire County in 1963 was somewhat more than \$7000. Eleven percent of the owners had an annual income of over \$20,000, and controlled 21 percent of the acreage. (If this same data were collected today, the median income would likely be about \$9000 and those earning over \$25,000 would probably control about 21 percent of the forest land area.)

Interestingly, less than one-quarter of forest landowners in Berkshire County felt that their taxes were too high, and a few of them thought that their taxes were too low. Thirty percent expressed no opinion about the tax burden. These results are not surprising in view of the relatively high income level of the typical forest landowner. This study suggests,

therefore, that the new type of forest landowner in New England usually has a reasonable income and has no pressing need for current income from his land.

Use of the Land

When asked why they held their land, 54 percent of the landowners in Berkshire County indicated that it was for personal recreation and 41 percent stated that they attained satisfaction simply through the act of ownership. About 28 percent were interested in wildlife development and 25 percent were interested in nature study and conservation. These percentages add up to more than 100 percent because many owners selected more than one woodland use as their reason for holding land. Overall, the dominant consideration of forest landowners was recreation.

Although timber production was given as one of the reasons for owning woodlands by 34 percent of the owners, only a fifth had made timber sales. However, a much larger number of owners had harvested forest products for their own use. When asked the reason for not selling timber, more than half the respondents believed they had too few saleable trees; one-quarter pleaded ignorance about such matters; and most significant of all, a third expressed fear that harvest operations would destroy the aesthetic value and usefulness of the woodlands.

Of those who had sold timber, 30 percent sold it without restriction; the buyer or logger selected the trees to be cut. About 35 percent used minimum size to designate the trees to be harvested. Surprisingly only 25 percent of the owners had trees marked for cutting in advance and then, on occasion, this was accom-

plished by the buyer. In general, the study suggests that many woodland owners have little real knowledge about the potential of their holdings.

Woodland Preservation

To ascertain whether there was a widespread well-entrenched preservationist bias, the questionnaire asked owners how much woodland in the County should remain “*permanently uncut*.” More than two-fifths of the respondents (who owned about the same proportion of the acreage) believed that as much forest land as possible should be permanently uncut. Another fifth thought that some, but not all, of the land should be preserved. When the personal characteristics of the preservationist group were compared with the remainder of the replies, it appeared that preservationists were slightly better-educated, had somewhat higher incomes, and were much more likely to be summer residents than other Berkshire County landowners.

Nevertheless, more than 10 percent of the “*preservationists*” had sold timber, and about a fourth of them had harvested forest products of some kind. Further questions revealed that most of them accepted the cutting of mature trees for purposes of improvement and forest thinning. Only 2 percent would have prohibited cutting by law. It appears that the words “*permanently uncut*” were interpreted by most of this group to mean “*permanently kept in forest*.” They favored preserving the aesthetic value of the woodlands but not necessarily every tree.

Thus, the large majority of the owners were willing to have selected mature trees cut if the aesthetics of the forest were not destroyed.

Much of the material in this article was drawn from a study "Forest Ownership Characteristics and Attitudes in Berkshire County, Massachusetts" by R. G. Babeu, A. D. Rhodes, W. P. MacConnell, and J. H. Foster of the University of Massachusetts. Copies of the study may be obtained from W. P. MacConnell of the Forestry Department of the University of Massachusetts, Amherst, Massachusetts.

Quite obviously, however, many of the wealthier and better educated owners were fearful that any type of forest cutting or timber management would hurt the aesthetics of their land. When in doubt they simply let the trees grow.

Conclusion

Noncommercial owners of forest land are now of dominant importance in New England. To inform this new type of owner about techniques of forest management which will produce added income, increase the wildlife population and protect aesthetics, an educational campaign is clearly needed. In addition, logging contractors and woods crews should be trained to maintain the aesthetic values while they cut timber. Only by catering to these desires of the new landowners can the logging operators and wood-using industries in New England maintain access to most of the region's forest land.

Here's New England -

MANUFACTURING INDEXES (seasonally adjusted) 1957-59 = 100	NEW ENGLAND			UNITED STATES		
	pApr. '68	Mar. '68	Apr. '67	Apr. '68	Mar. '68	Apr. '67
All Manufacturing	146	149	149	164	164	158
Nonelectrical Machinery	156	159	169	177	180	184
Electrical Machinery	170	176	174	183	187	180
Transportation Equipment	156	157	171	175	178	166
<i>Textiles, Apparel, Leather</i>	105	110	104	144	144	136
Textiles	98	104	99	144	150	138
Apparel	114	118	114	n.a.	148	142
Leather and Shoes	108	111	101	n.a.	114	107
Paper	144	146	141	n.a.	n.a.	152
BANKING AND CREDIT	Percent Change From:			Percent Change From:		
Commercial and Industrial Loans (\$ millions) (Weekly Reporting Member Banks)	Apr. '68	Mar. '68	Apr. '67	Apr. '68	Mar. '68	Apr. '67
	2,976	+ 3	+13	67,404	+ 2	+ 9
Deposits (\$ millions) (Weekly Reporting Member Banks)	8,189	- 1	+11	198,555	0	+ 7
Check Payments (\$ billions) (Selected Metropolitan Areas)*	310.9	+ 7	+21	4,215.2	+ 5	+14
Consumer Installment Credit Outstanding (index, seas. adj. 1957-59 = 100)	187.6	0	+ 5	233.9	0	+ 6
DEPARTMENT STORE SALES (index, seas. adj. 1957-59 = 100)	140	- 9	+10	n.a.	n.a.	n.a.
EMPLOYMENT, PRICES, MAN-HOURS & EARNINGS						
Nonagricultural Employment (thousands)	4,355	+ 1	+ 3	67,563	+ 1	+ 4
Insured Unemployment (thousands) (excl. R.R. and temporary programs)	93	-16	- 7	1,175	-18	-16
Consumer Prices (index, 1957-59 = 100) (Boston)	123.6	n.a.	n.a.	119.9	0	+ 4
Production-Worker Man-Hours (index, 1957-59 = 100)	101.3	- 3	- 4	114.0	- 1	- 1
Weekly Earnings in Manufacturing (\$) (Mass.)	109.87	- 2	+ 3	118.70	- 1	+ 6
OTHER INDICATORS						
<i>Total Construction Contract Awards** (\$ thous.)</i>	325,818	+12	+61	4,666,292	+ 9	+16
Residential	109,753	+40	+66	2,008,941	+16	+41
Nonresidential	118,163	+11	+19	1,536,184	+ 4	- 1
Public Works and Utilities	97,902	- 1	+166	1,121,167	+ 4	+17
Electrical Energy Production (4 weeks ending April 20) (index, seas. adj. 1957-59 = 100)	184	- 2	+ 7	198	0	+ 7
Business Failures (number)	55	- 8	-37	1,003	- 2	-14
New Business Incorporations (number)	1,205	+10	+28	19,641	+ 9	+25

*Seasonally adjusted annual rate

**3-mos. moving averages — Feb., Mar., Apr.

p = preliminary

n.a. = not available