



State Forest Development Act

Some 60,000 to 100,000 acres are harvested each year in North Carolina and not replanted. Because small woodlot owners do not recoup a replanting investment in the short term, the legislature passed a cost-sharing program as an incentive to increase reforestation. One of only six cost-sharing programs in the country (California, Minnesota, Mississippi, South Carolina, and Virginia have the others),¹⁵ the program subsidizes reforestation costs on a first-come, first-served basis until the annual fund is gone.

The Division of Forest Resources administers the program, including the fund, in the following manner. A forest management plan, usually developed by a landowner with a division forester, must first be approved by the division. The division reviews per-acre cost estimates for each type of procedure for which the owner requests funds, using cost limits approved each year by the Secretary of NRCD. Site preparation, tree planting or seeding, and natural regeneration are all eligible practices. For approved plans, the division *sets aside* up to \$200 per acre for a maximum of 100 acres per individual per year, *to be paid when the project is completed*. If the work is not started within two years or completed in three years, the set-aside funds may be placed back into the general pool

for someone else.

The original legislation included a \$500,000 annual state appropriation for the "forest development fund," to be matched on a one-to-two basis by a new tax on processed timber, paid by wood processors. Under this one-to-two ratio, the fund could rise to a maximum of \$1.5 million per year (\$500,000 state appropriation and \$1 million in tax revenues). In 1979 and 1980, demand for funds exceeded the \$1.5 million annual supply. Meanwhile, the revenues from the wood processing tax averaged about \$1.3 million per year, (\$300,000 over the \$1 million needed for the match), creating a surplus in the tax fund portion of the pool. Consequently, in 1982, the legislature changed the ratio from one-to-two to one-to-three, so that the \$500,000 annual appropriation could be matched by \$1.5 million in tax funds each year. Beginning with fiscal year 1983, a total of \$2 million could be available per year. If current levels of the timber tax and the state appropriation continue, however, the surplus in the fund will be gone by the end of fiscal '83, says Green, with only about \$1.8 million available for each future year.

The pool of funds generated by the state appropriation and the timber tax stimulates significant private investment in reforestation. Since July 1, 1978, when the program began

operation, the state has provided 60 percent of the costs of a project and the individual owner 40 percent. To stimulate more regeneration, the secretary of NRCD, under authority of the act, changed the state-to-private cost share from a 60-40 ratio to a 50-50 ratio, beginning in fiscal year 1984. By putting up only half the cost of regeneration, says Green, "the state hopes to be able to spread the resources to more people," and hence increase acreage regenerated.

In August 1980, the Fiscal Research Division of the General Assembly analyzed the first two years of operation of this program. Three researchers spent some 120 hours reviewing every project, comparing estimated with actual costs and the number of acres actually regenerated with the amount of acreage approved for funds. The legislative analysts found that for fiscal years 1979 and 1980 the Forest Service set aside \$2.74 million in payments to landowners but paid out only \$1.62 million — 59 percent of approved funds. Generally a multi-step project (i.e., to chop brush, burn the residue, and then replant) should take only one year — or two with special difficulties (bad weather, no available contractors, etc.). *But under the current law, landowners have up to three years to complete the work.* Under this three-year provision, the 59 percent figure is not surprising. The current approval and set-aside procedure thus ties up funds unnecessarily. The analysts, who compiled the data for each of the 13 forest districts in the state, concluded: *"Those districts with a low completion rate . . . are reducing program effectiveness by tying up funds that could be released and recommitted."*

The forest service now has a county-by-county computer printout of all the projects approved for cost sharing, according to amount committed and balance due the project. The number of acres regenerated does not appear on the printout. Nor does the total acreage owned by each applicant. The division does have aggregate data for acreage *approved for regeneration* for each county. But to determine the *actual number of acres regenerated* or the acreage held by individual landowners, a researcher would have to review every application in the central division files and then talk to foresters (or county rangers) in many counties for updates and for confirmation.

The limitations of the publicly available data prompted a special provision in the 1983 appropriation bill regarding the Forest Development Act. On April 12, 1983, the budget subcommittee responsible for reviewing future funding levels of forestry programs recommended that the Joint Appropriations Base Budget Committee require the Secretary of

NRCD to report to the legislature "the number of acres reforested, type of owner assisted, *geographic distribution of funds*, the amount of funds encumbered, and other matters. The report *shall include the information by forestry district* and statewide and shall be for the two fiscal years ended prior to the date of the report (emphasis added)."¹⁶

Despite limitations in the data currently available, analysis by the Center of the computer printouts does provide some revealing statistics. Individual owners are participating in the program far more than corporations. In 1978-1983, the division approved 1100 applicants for the cost-sharing funds, 88 percent of whom were individual owners. "The more aggressive and sophisticated landowners use the program," says Division Director Green. "They have the money for the other half [of the cost] and the assurance that it's a valid investment." Corporations do not utilize the state subsidy, Green thinks, because of the 100-acre limit per year, per applicant. Hence, the program does appear to be reaching the individual small woodlot owner and not the forest industry. "Small," however, can refer to sophisticated timber owners/managers of hundreds or even thousands of acres, woodlot owners resourceful enough to seek assistance for 100 acres every year.

From July 1978 (when the program began) through January 1983, the state has committed \$5.9 million to subsidize regeneration efforts,

Cutting pulpwood



Howard Muse

which has prompted another \$4.0 million in private commitments for regeneration (see Table 4). While the state-administered subsidy has stimulated the economy during a recessionary period and spurred regeneration efforts — both notable achievements — the benefits have accrued selectively. Out of the \$5.9 million, \$2 of every \$5 have gone to only 10 counties. Counties in the coastal plain and Piedmont, the center of the state's forest products industry, received the lion's share of the cost-sharing funds. Bladen, Franklin, and Edgecombe counties topped the list. This disproportionate benefit to certain areas of the state stems from two factors.

First, the General Assembly designed the program to "provide financial assistance to eligible landowners to increase the productivity of the privately-owned forests of the State through application of forest renewal practices."¹⁷ The forestry division has implemented this mandate primarily through regeneration of pine

forests, which are concentrated in particular Piedmont and coastal counties. Western counties, which produce primarily hardwoods, receive very little assistance from this program. Hardwood forests generally depend more on natural regeneration than on the replanting techniques used for pine forests.

The second cause for the concentration of funds in a few counties is the method of approval for the funds — a first-come, first-served system. Counties with the most aggressive rangers and landowners benefit from the program more than those with less experienced rangers and owners. No overall plan exists for targeting funds. State Forester Green defends the distribution method like this: "The plan was designed to accomplish regeneration, not to serve as a welfare payment nor be equally distributed throughout the state. A first-come basis assures production. And this program is designed to promote the growth of timber, not to help landowners." Without such a

Table 4. Where Does the N. C. Forest Development Program Provide Assistance? Top Ten Counties, By Amount of Cost-Sharing Funds Received (July 1978 - January 1983)

County	Funds Committed for Project (60% of total project cost) ¹	Total Cost of Project (60% state funds plus 40% private funds) ²	No. of Acres Approved for Regeneration ³
1. Bladen	\$296,533	\$494,221	5,534
2. Franklin	\$245,976	\$409,960	4,921
3. Edgecombe	\$244,650	\$407,750	4,927
4. Moore	\$233,462	\$389,103	5,142
5. Pender	\$221,576	\$369,293	3,745
6. Chatham	\$218,195	\$363,658	3,483
7. Halifax	\$217,165	\$361,941	4,562
8. Nash	\$202,758	\$337,930	3,391
9. Pamlico	\$197,444	\$329,073	2,682
10. Jones	\$192,935	\$321,558	2,186
Total For Top Ten Counties	\$2,270,694	\$3,784,490	40,573
Total For All 100 Counties	\$5,931,116	\$9,885,191	116,324

¹These funds come from two sources, a state appropriation (\$500,000 a year for fiscal years 1979-1983) and a tax on timber processors, collected by the N.C. Department of Revenue and passed on to the Division of Forest Resources to distribute as part of the pool of money indicated in this column. For further information on the levy schedule and collection figures on the timber processing tax, contact Perry Draper, forestry tax administrator, N.C. Department of Revenue (733-3166).

²Beginning in fiscal year 1984 (July 1, 1983), the ratio changes to 50 percent state and 50 percent private.

³Number of acres for which the N.C. Division of Forest Resources approved cost-sharing funds. Land owners have three years to use the funds and must begin to use them after two years. In some cases, the number of acres actually improved through this program are not the same as the number approved for improvement, but no data source currently provides the number of acres actually improved. According to Division Director H. J. "Boe" Green, the total approved and actually improved are substantially the same.

Source: Division of Forest Resources, N.C. Dept. of Natural Resources and Community Development.

Table prepared for N.C. Insight by Kevin McManus.

**Table 5. Top Softwood-Producing Counties in North Carolina
How Much Assistance Did They Get from
N.C. Forest Development Program?**

Top Ten Counties in Production of Sawtimber, Veneer/Plywood (1979) ¹		Amount of Forest Development Program (FDP) Funds Received (1978-83) ²	Rank Among 100 Counties in FDP Funds
Rank in Production	(1000 bd. feet)		
1.	Craven (59,968)	\$103,511	20
2.	Sampson (44,675)	85,718	25
3.	Columbus (40,382)	83,366	26
4.	Montgomery (38,484)	92,121	22
5.	Beaufort (36,343)	80,749	28
6.	Bertie (34,508)	87,341	24
7.	Gates (32,870)	61,854	35
8.	Chatham (32,757)	218,195	6
9.	Bladen (32,040)	296,533	1
10.	Wake (30,913)	24,782	48

Top Ten Counties in Production of Pulpwood (1979) ¹		Amount of Forest Development Program (FDP) Funds Received (1978-83) ²	Rank Among 100 Counties in FDP Funds
Rank in Production	(standard cords)		
1.	Craven (131,648)	\$103,511	20
2.	Brunswick (77,284)	167,910	13
3.	Halifax (62,148)	217,165	7
4.	Beaufort (58,505)	92,121	22
5.	Anson (57,919)	147,783	17
6.	Sampson (54,026)	85,718	25
7.	Wake (53,082)	24,782	48
8.	Bladen (52,072)	296,533	1
9.	Onslow (48,012)	58,675	38
10.	Columbus (47,107)	83,366	26

¹Source is "County Figures for Forest Products Drain—1979," N.C. Forest Service, N.C. Department of Natural Resources and Community Development. Figures are for 1979, the latest year available. These harvest figures are based on reporting forms completed, in most cases, by sawmill companies. The sawmills report their best estimates of the county in which the timber was harvested. In using these harvest figures as a basis for comparison with forest development program funds, three factors might skew the harvest data somewhat—the location of: 1) a national forest in a county; 2) major forest company lands in a county; and 3) major sawmills in a county. Croatan National Forest and major Weyerhaeuser and International Paper holdings, for example, are located in Craven County. Hence, timber harvested in Croatan and on Weyerhaeuser and Inter-

national Paper lands are included in the Craven County total. But National Forest lands are not eligible for state forest development program funds and forest companies tend not to use this program. Similarly, two major sawmills are located in Montgomery County and might tend to report the source of the timber as Montgomery rather than the county in which the timber was actually harvested. Despite these data collection problems, this county-by-county harvest summary is the best available source for comparison with the counties receiving the forest development program funds.

²Source, N.C. Forest Service, computer printout labeled, "Grant Information on Financial Transactions System," 4300 Natural Resources and Community Development, Grants by State Program for the Period Ended 1/31/83, pp. 73-116.

Table prepared for N.C. Insight by Bill Finger and Pam Hunt of the N.C. Center for Public Policy Research.

system, Green says, he would have a hard time with requests for favors. "I get calls from influential people asking, 'Can I get moved ahead on the list?' I can answer 'No.' Everyone has an equally fair chance under a straight first-come system."

But this first-come, first-served system is not sending the most funds where the most timber harvesting is taking place (see Table 5). The forest development program works almost exclusively with softwood-producing projects, yet the leading softwood-producing counties are not receiving the most cost-sharing funds. Craven County, which harvested more softwood than any other North Carolina county in 1979 (the latest year for which statistics are available), ranked only 20th in the amount of cost-sharing funds received. Sampson County ranked second (sawtimber, veneer/plywood) and sixth (pulpwood) among softwood producers, but a distant 25th in amount of state cost-sharing funds. Wake County, 10th (sawtimber, veneer/plywood) and 7th (pulpwood) ranking softwood producer, barely cracked the top half in benefits from the program (48th in amount of funds).

Of the ten top sawtimber and veneer/plywood producing counties, only two (Chatham and Bladen) ranked in the top ten according to amount of cost-sharing funds received. Also, of the ten top pulpwood producing counties, only two (Halifax and Bladen) ranked in the top 10 in cost-sharing funds received. This lack of correlation between the top softwood-producing counties and the counties receiving the most cost-sharing funds reflects poorly on the first-come, first-served system. If the special budget provision in the appropriation bill discussed above is approved by the legislature, the newly required data on "geographic distribution of funds" would provide an important new yardstick for assessing the correlation in future years — from an easily available data source.

Harvesting with a hydraulic loader.



Thanks in large measure to the Forestry Incentives Program and the state Forest Development Act, tree planting on private, non-industrial land in North Carolina is on the upswing. It increased from 21,000 acres a year during the 1960s to 27,000 acres a year in the 1970s. By 1979, the figure reached 40,000 acres replanted, and in 1980, 44,000. In 1981 and 1982, the division included "tree planting" figures together with "natural regeneration" and "direct seeding" acreage in a new reporting category called "forest establishment." Previously, natural regeneration had been included in the "site preparation" category. In 1981 and 1982, the "forest establishment" acreage totaled 45,000 and 46,000, respectively.¹⁸ North Carolina's total replantings in the 1970s ranked fourth in the South, behind Virginia (45,000 acres a year), Mississippi (33,750 acres a year), and Alabama (28,000 acres a year).¹⁹

In 1970, Virginia amended its Seed Tree Act to *require* that pine timberland be reforested after harvesting by artificial or natural means. This act also established a state forest incentives program that has served as a model for North Carolina, Mississippi, and other states. During the 1970s, Virginia was the only southern state where non-industrial private tree planting exceeded industry tree planting: 451,523 acres versus 362,111 acres.

The Virginia legislation has received attention in at least two recent reports. The Council of State Governments, which published a major analysis of forestry policies, includes the Virginia reforestation laws in its 1982 report on suggested state legislation. Also in 1982, Duke University and the Southern Growth Policies Board (SGPB) released a report calling the Virginia legislation "a model reforestation program appropriate for the ownership pattern characteristic of Southern states."²⁰ (See page 48 for excerpts from the SGPB report.) While known as a "mandatory" program, the Virginia system depends more on incentives than on mandatory reforestation by regulation, say both the Duke/SGPB report and State Forester Green.

Green, the Duke/SGPB authors, and other leading forestry spokespersons do not advocate mandatory reforestation, where the state would require a private landowner to reinvest in the cutover land through replanting efforts. "Mandatory reforestation should not be enacted as state law without industry support," write Patricia Dusenbury, Jack P. Royer, and Fran Hunt, authors of the Duke/SGPB report. "I think it's better to leave it up to the owner on what he does on his land," adds Dr. Mike Levi, head of Extension Forest Resources at NCSU.