

OKLAHOMA DEPARTMENT OF AGRICULTURE, FOOD AND FORESTRY



FORESTRY SERVICES

FOREST REGENERATION CENTER



Helping Oklahomans Become Better Land Stewards Through Quality Regeneration Services

Mission

The mission of the Forest Regeneration Center Program is to help Oklahoma landowners by providing quality natural resource programs & services that emphasize the planting of conservation tree seedlings. The program provides:

- ◆ Conservation tree seedlings for reforestation, wildlife habitat development, erosion control, windbreaks, and a variety of other environmental needs & enhancements.
- ◆ Technical assistance to landowners.
- ◆ Environmental education service to schools, civic groups, and other organizations.
- ◆ Plant materials & professional advice needed for successful & enduring planting efforts.

Oklahoma's Natural Resources

74 percent of Oklahoma forests are owned by families and individuals (i.e. non-industrial private landowners (NIPF)). Unfortunately, these NIPF lands are generally under limited, if any, professional management. For example, the forests of Oklahoma produce timber at only 30 percent of their potential, and an estimated 3 out of 10 harvested acres are intentionally regenerated.

The Need for Proper Stewardship

Our forests and natural resources greatly contribute to the economic, ecological, and social value of the land and people. Key resource values include:

- ◆ Clean air and water
- ◆ Timber based industry
- ◆ Erosion control
- ◆ Recreational opportunities
- ◆ Wildlife habitat

The Regeneration Program

The Forest Regeneration Center offers citizens a variety of natural resource programs and services, and a consistent and dependable supply of quality conservation tree seedlings. In conjunction with several universities, research-based cooperative programs are carried out to continually evaluate and improve seed sources to ensure that landowners receive trees that are highly adaptable to the often harsh and diverse Oklahoma climate and environment. As professional land managers, foresters are focused on long-term benefits, and are trained to give advice that provides for the landowner's best interest for the long-term. A visionary perspective must be maintained as forestry involves very long-term investments and benefits which have significant impacts on the quality of life.

Timber Based Benefits are the Most Readily Observed

- ◆ The forest industry employs over 10,800 people and accounts for nearly 4.1% of manufacturing employment in Oklahoma. Total annual payroll is over \$260 million.
- ◆ The value of shipments exceeds \$1.66 billion annually.
- ◆ The value of timber harvested is \$200 million annually and is ranked fifth among all agricultural commodities in Oklahoma.
- ◆ Over one-fifth of Oklahoma is covered by forests. This is especially significant in eastern regions where forest industry accounts for 18 percent of total manufacturing employment and 12 percent of the value of shipments.



The Budget and Costs

The current budget for the Forest Regeneration Program is approximately \$650,000. User fees generate approximately \$620,000 to cover 95% of program costs. This means that the total cost of the program to the citizens of Oklahoma is less than \$30,000 per year. On a per capita basis this equates to less than one cent per person annually. This is a prime example of an extremely cost effective program. Based on the past 4 years, program benefits outweigh costs by an average of 166 to 1. In sum, each citizen contributes one cent each year and receives approximately \$1.66 in benefits.

Forest Values and Benefits

Numerous non-timber resources contribute to the economy, ecology, and quality of life to all Oklahomans. A recent analysis of these values for the past four years indicates that:

- ◆ Windbreak establishment contributes over two million dollars in environmental benefits each year with a four year total of over \$9.1 million in present value dollars.
- ◆ Erosion control using trees results in an average of over \$280,000 value added each year. Over the life of the treatment this equates to a four year total present value (today's dollars) of over \$1.1 million.

- ◆ Christmas trees, an alternative agricultural crop, though a rather minor crop in terms of acreage, gives a significant boost to the Oklahoma economy. An average contribution of added economic benefit for the past four years exceeds \$1.2 million per year.
- ◆ Many other "intangible" benefits are derived from the forest including oxygen production, watershed value, scenic benefits, ecosystem synergism and flow, and a variety of other values essential for human health and quality of life.

Illustration of Benefits

The following table illustrates the net annual benefits to Oklahomans provided by the Forest Regeneration Program. Total benefits for the past 4 year period have exceeded \$49 million. Note that this economic analysis shows utility uses of conservation tree seedlings. Many of the less tangible values such as oxygen production, recreation, scenic value, etc. are not included in this illustration. Current research indicates that these less tangible values are quite important human values. Though difficult to quantify in economic terms, a reasonable assumption would be that the intangibles are at least as valuable as the tangible components.



Net Annual Benefits to Oklahomans Provided by the Forest Regeneration Program					
Use	98 / 99 \$	99 / 00 \$	00 / 01 \$	01 / 02 \$	Total \$ (4 Years)
<i>Windbreaks</i>	\$ 1,897,934	\$ 3,610,541	\$ 2,490,616	\$ 1,174,650	\$ 9,173,741
<i>Fuelwood</i>	\$ 5,150	\$ 2,050	\$ 1,050	\$ 1,150	\$ 9,400
<i>Erosion Control</i>	\$ 413,688	\$ 238,375	\$ 299,875	\$ 187,438	\$ 1,139,376
<i>Livestock Protection</i>	\$ 43,333	\$ 26,667	\$ 13,778	\$ 32,667	\$ 116,445
<i>Wildlife Habitat</i>	\$ 94,971	\$ 47,287	\$ 116,800	\$ 155,785	\$ 414,843
<i>Timber Production</i>	\$ 8,522,857	\$ 9,851,500	\$ 9,012,571	\$ 6,005,714	\$33,392,642
<i>Christmas Trees</i>	\$ 1,152,800	\$ 1,187,200	\$ 976,800	\$ 1,560,800	\$ 4,877,600
<i>Total</i>	\$12,130,733	\$14,963,620	\$12,911,490	\$ 9,118,204	\$49,124,047