

RESOURCE CONSERVATION AND FORESTRY DIVISION



FISCAL YEAR 2003 ANNUAL REPORT

523 East Capitol Ave.
Pierre, South Dakota 57501-3182
Phone: (605) 773-3623
Toll Free Hotline: 1-800-228-5254 (SD Calls Only)

Table of Contents

	Page
Introduction	2
South Dakota’s Forest Resources	3
Service Forestry Programs	
Forest Stewardship Program (FSP).....	5
Windbreak and Shelterbelt Plantings.....	7
Urban and Community Forestry (U&CF).....	8
U&CF Challenge/Sub-Grant Program.....	10
Forest/Timber Management.....	12
Forest Health Management.....	13
Forest Inventory Analysis.....	14
Economic Action Program.....	15
Black Hills National Forest Phase II Amendment.....	15
Conservation Programs	
Coordinated Soil & Water Conservation (CSWC) Grants.....	16
Conservation District Revolving Loan Fund.....	17
Range Management.....	17
Wetlands Program.....	18
Assistance to Conservation Districts.....	18
Information and Education Activities	
Smokey Bear and Wildland Fire Prevention.....	19
Urban and Community Forestry.....	20
Arbor Day.....	20
Tree City USA.....	21
South Dakota Land Stewardship Spotlight.....	22
Project Learning Tree (PLT).....	23
Tree Farm.....	24
Logger Education to Advance Professionalism (LEAP).....	24
Resource Conservation Speech Contest.....	25
State Capitol Christmas Tree.....	25
Resource Conservation & Forestry Fire Assistance	
Fire Rehabilitation Projects.....	26
Financial Assistance to Local Organizations	
Summary of Grants Awarded.....	28

Introduction

The mission of the Division of Resource Conservation and Forestry is to conserve, protect, improve, and develop the natural resources of South Dakota for its citizens.

State fiscal year 2003 was another year of movement toward the mission set forth by the Division of Resource Conservation and Forestry within the State Department of Agriculture. Several focused projects that fit the division's stated goals and objectives and meet the needs of the public were continued in FY 2003. The Forest Land Enhancement Program was created and funded by Congress in the 2002 Farm Bill. The division received forest health funding from the USDA Forest Service to combat growing bark beetle populations in the Black Hills. The Sinai community re-greening project was a success, and community tree inventories using "Davey TreeKeeper Online" is now in full swing. These projects and many others are described in detail in this report.

The division administers a wide range of programs in order to accomplish its mission. In the following pages are brief descriptions and actual accomplishments attributable to each of the division's many programs during fiscal year 2003. State fiscal years begin on July 1 and ends on June 30. Each program is designed to provide quality technical assistance and, in some cases, financial assistance to our citizens and cooperators. A summary by county or conservation district of the grants that were awarded to our cooperators during the year can be found at the end of the report.

Recent reorganization of the division took effect on July 1, 2001. On that date, the wildfire and prevention programs became a separate division, the Division of Wildland Fire Suppression, under the leadership of the State Wildfire Coordinator. Because of that reorganization, this report does not include fire accomplishments as part of this report.



South Dakota's Forest Resources

This section provides a summary of South Dakota's forest resources as described in the publication "*South Dakota's Forest Resources outside the Black Hills National Forest, 1996*" unless otherwise noted. South Dakota has 1.6 million acres of traditional forest land representing only 3.2 percent of its land area of 49.3 million acres. To portray the distribution of forest land, the state is divided into five river basin areas (Figure 1). The state's forests are dominated by western ponderosa pine timberland that occupies 1.1 million acres, or 69 percent of the forested area. The pine forest occurs in the Black Hills, the Short Pines and the Slim Buttes areas of the Cheyenne and Belle Fourche-Grand Moreau River basins, and on or near the Pine Ridge and Rosebud Indian Reservations of the White-Niobrara River basin.

The Black Hills region, located in the far western part of South Dakota and in northeastern Wyoming, is recognized as a national geologic landmark. This isolated, mountainous island of granite, limestone, and metamorphic rock is roughly 100 miles long and 60 miles wide and rises from the surrounding plains to an elevation of 7,242 feet at the top of Harney Peak.

The remaining forest lands are found in the plains portion of the state and are primarily associated with lakes and waterways. The majority of these forested areas are located along the Missouri River and its major tributaries such as the Cheyenne, Grand, Moreau, White, and Bad Rivers in the west, and the Vermillion, James and Big Sioux Rivers in the east. Other areas of forest land are found along the Minnesota River and in the Coteau area of northeastern South Dakota. Forest lands in the eastern river basins comprise only about one percent of the total land area, and about 9 percent of the total forest area in the state. They consist primarily of tree species associated with eastern hardwoods such as ash, basswood (linden), bur oak, hackberry, honeylocust, elm, cottonwood, and willow.

South Dakota's native woodlands and forests are predominately publicly owned. Only 35 percent (566,000 acres) are privately owned. Approximately 82 percent of the publicly owned forest land is administered by the Black Hills National Forest. The remaining 18 percent is owned by the Custer National Forest, the National Park Service, the Bureau of Land Management (BLM), and the State of South Dakota. Most of the state-owned forest is within Custer State Park. Forest land located east of Rapid City in the plains portion of the state is primarily under private ownership.

South Dakota has an additional 1.3 million acres of non-forest land with trees. Non-forest land with trees includes narrow wooded strips and windbreaks, wooded pasture, urban forests, and other land with trees. Seventy-three percent of the non-forest land with trees is pasture. In past years eastern red cedar and Rocky Mountain juniper have encroached into pastures. The result has been a loss of forage production and livestock handling problems. On the positive side, the trees offer shelter against wind and control soil erosion.

There are an estimated 205,000 acres of narrow wooded strips and windbreaks in South Dakota that make up the state's agroforestry resource. Located almost entirely on private land, these areas include native woody vegetation found along streams and rivers, and narrow tree and shrub plantings

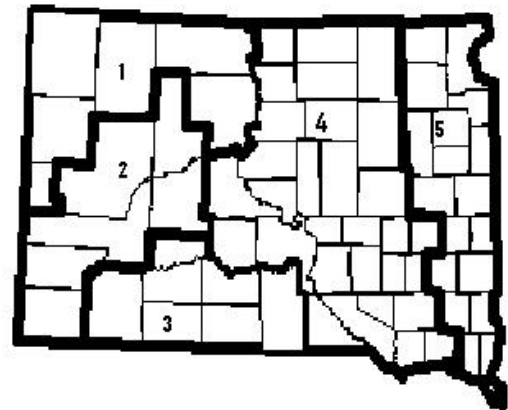


Figure 1: Forest Basin Areas.
1 - Belle Fourche-Grand Moreau
2 - Cheyenne
3 - White-Niobrara
4 - Bad-Missouri-Coteau-James
5 - Minnesota-Big Sioux-Coteau

adjacent to homes, farm buildings, roads, crop lands, livestock feeding areas, and other developments. There are about 95,000 acres of narrow wooded strips and 105,000 acres of windbreaks. These trees conserve natural resources, increase crop and livestock production, act as living carbon sinks and atmosphere scrubbers, protect water quality by holding soil and filtering nutrients, protect public right-of-ways from drifting snow, provide valuable wildlife habitat and otherwise improve human environments.

Since conservation tree planting began in earnest with the Prairie States Forestry Project of 1935-42, an average of almost 5,000 acres of windbreaks and shelterbelts have been planted each year in South Dakota (NRCS data). This equates to over three million tree and shrub seedlings annually. Each year, an average of 400 acres of older, deteriorating windbreaks are being restored to workable condition using silvicultural (forestry) practices, including replanting and supplemental planting.



Urban and community forests are gaining more and more attention as important forest resources in need of proper care and management. The urban forest consists of the trees and other woody vegetation that grow within the limits of our cities and towns. According to the *1990 Census of Population and Housing*, there are 308,800 acres of urban and developing lands in South Dakota. There are 309 incorporated communities ranging in population from 4 in Hillsview to 120,000 in Sioux Falls. In addition, there are many unincorporated communities and housing developments, especially on tribal lands.

While the urban and development acreage represents only 0.6 percent of the total land area in the state, approximately 493,500 people, or 71 percent of the state's population, live within our communities and housing developments, whether incorporated or not. In his book, *The Geography of South Dakota*, Edward Patrick Hogan states that some 50% of the state's population lives in communities of 2,500 or larger, and that another 39% live in communities of less than 2,500, or in open country where they are not involved in agriculture. The remaining 11% of the people are classified as farmers and ranchers. Our urban or community trees have their own unique problems and require a considerable amount of professional care and management if they are to flourish.

South Dakota's forest lands, woodlands, windbreaks, shelterbelts and urban forests provide a wide range of multiple benefits to our citizens. The benefits include wildlife habitat, recreational opportunities, quality water, energy savings, an aesthetically pleasing environment, increased crop and livestock production and forest products, in addition to the jobs that forest industry creates. As our state's population increases and shifts from rural to urban, our relationship with forest resources becomes increasingly complex. More demands are being placed on private woodlands and agroforestry areas to provide a multitude of economic and environmental benefits. Biodiversity and ecosystem management are becoming important considerations when managing our forest resources. Along with increased demand comes the need to practice good forest stewardship to ensure the sustainability of our forests for future generations.

The mission of the division is to conserve, protect, improve, and develop the natural resources of South Dakota for its citizens. The division manages various programs in its effort to accomplish this mission. On the following pages are brief descriptions and actual accomplishments attributed to each service forestry program during fiscal year 2001.



Service Forestry

Forest Stewardship Program (FSP)

The Forest Stewardship Program (FSP) is the division's primary source of funding for forest management technical assistance. Technical assistance is based on landowner objectives, health, and composition of the existing forest, capability of the site and stewardship principles. Detailed forest stewardship plans are prepared based on forest land examinations. Planting designs are prepared for tree and shrub plantings for windbreaks, living snow fences, wildlife habitat, Christmas trees, fuelwood, reforestation, and other purposes. Assistance is also offered in preparing pre-commercial and commercial timber stand improvement recommendations, identifying and offering solutions to forest insect and disease problems and other forest resource management related assistance as appropriate.

The FSP is financed and administered nationally by the USDA Forest Service. The program takes a multi-disciplinary approach to forest land management involving many agencies with the Division of Resource Conservation and Forestry as the lead agency. The Forest Stewardship Coordinating Committee (FSCC) advises the State Forester on how FSP should be implemented in South Dakota.

The FSCC is made up of representatives from the following organizations:

- USDA Forest Service, Black Hills National Forest*
- USDA Natural Resources Conservation Service*
- USDA Farm Service Agency*
- USDI Fish & Wildlife Service*
- SD Dept. Game, Fish & Parks*
- SD Dept. of Environment & Natural Resources*
- SD Cooperative Extension Service*
- SD Association of Conservation Districts*
- SD State Conservation Commission*
- United Sioux Tribes*
- Black Hills Forest Resource Association*
- Rosebud Sioux Tribe*
- SD Tree Farm Committee*
- Keep South Dakota Green*
- Pheasants For Everyone*
- Consulting Foresters*
- Industry Foresters*
- Forest Stewards*

Fiscal Year 2003 was the final year of funding for the Stewardship Incentive Program (SIP). This year, a grant was obtained from the USDA Forest Service that allowed cost share incentives for forest health practices that addressed specific insect pests. Practices were approved for thinning to reduce bark beetle mortality and renovation of insect infested windbreaks. The Stewardship Incentive Program ended with passage of the 2002 Farm Bill.

The USDA Natural Resources Conservation Service administers the Forestry Incentive Program. Responsibility for FIP technical assistance is delegated to the state agencies through the USDA Forest Service Cooperative Forestry program. The program provided 65% cost-share for timber stand improvement and reforestation work on eligible non-industrial private forest-lands in the state. The Forestry Incentive Program ended with passage of the 2002 Farm Bill.

The Forest Land Enhancement Program was created and funded by Congress in the 2002 Farm Bill. It is designed to adopt the best characteristics of the SIP and FIP programs, and replace them. Division and FSCC efforts in FY 2003 focused on development of a State Priority Plan to guide the division in program implementation.

The division received forest health funding from the USDA Forest Service to combat growing bark beetle populations in the Black Hills. The division provided up to 50% cost-share to landowners for thinning to improve forest health.

FY 2003 Accomplishments

The South Dakota Forest Stewardship Plan was revised in FY 2002 to reflect current forest resource conditions and provide direction to the division over the next five years. Emphasis for the coming years will focus on forest health; continuing education in forest ecology, silviculture and BMPs for loggers, landowners, and resource professionals; an expanded role in the Forest Inventory Analysis; develop a programmatic agreement with the State Historical Preservation Office to facilitate protection of cultural resources; and coordinated implementation of the Forest Land Enhancement Program as it emerges from the 2002 Farm Bill.

The Division of Resource Conservation and Forestry provided 466 forest management and prairie forestry technical assists to private landowners, organizations, and government agencies across the state in FY 2003. Forest stewardship plans were written and approved for 19 private landowners covering 2290 acres and 9 forest management plans covering 993 acres. Consultants completed plans for 3 private landowners covering 210 acres as a result of cost-share assistance from the Stewardship Incentive Program.

Windbreak and Shelterbelt Plantations

Assistance and planning by division service foresters resulted in the planting of 199,919 new trees and shrubs on 417 acres for conservation purposes. Restoration was completed in 3 existing shelterbelts and windbreaks covering 11 acres. Division service foresters assisted with the establishment of 23 new shelterbelts, windbreaks, and living snow fences covering 71 acres, resulting



in the planting of 32,444 trees and shrubs. Wildlife plantings received the most attention from service foresters who designed 66 plantings for 335 acres involving 165,680 trees and shrubs. Most landowners utilized one or more of the cost-share incentive programs that are available. Only a few relied totally upon their own resources to get their trees planted. A breakdown of assistance provided by cost-share program use follows:

FY 2003 Tree Planting Accomplishments

Assistance Program	Projects	Acres Planted	Trees Planted
Stewardship Incentive Program	1	1	635
Conservation Reserve Program (CRP) Only			
New Establishment	7	71	35,961
CRP and GF&P			
New Establishment	58	259	126,777
Total CRP	65	330	162,738
Department of Transportation Living snowfence			
New Establishment	13	47	21,545
County Funded Living Snowfences			
New Establishment	2	3	1,508
EQIP & GF&P			
New Establishment	1	3	1,012
GF&P Only			
New Establishment	3	14	6,674
Renovation	1	6	611
Total GF&P Only	78	108	44,711
Total GF&P and Other Programs	59	262	127,789
No Cost-Share Program			
New Establishment	3	6	2,030
Total Establishment	89	406	198,573
Total Renovation	3	11	1,346
GRAND TOTAL	92	417	199,919

Urban & Community Forestry (UCF)

The South Dakota Division of Resource Conservation and Forestry offers urban and community forestry (U&CF) technical assistance to individuals, service organizations, non-profit groups and communities. The division provides technical assistance for establishing tree boards, developing tree ordinances, organizing street tree inventories, tree planting and maintenance, identifying and controlling insects and disease problems and grant preparation and administration. The division also provides training in all aspects of urban forestry and arboriculture (the care and maintenance of trees). Technical assistance is provided by one full time U&CF Coordinator, eight service foresters located throughout the state and Dr. John Ball, Associate Professor of Arboriculture and Urban Forestry at South Dakota State University. Dr. Ball also acts as "Volunteer Coordinator" for U&CF programs across the state of South Dakota. A portion of his salary and operating expenses are provided through the RC&F Division's Urban and Community Forestry Assistance Program.

The Division of Resource Conservation and Forestry directs its effort on assisting communities with the development of local community forestry programs. Local tree boards, which are a very important part of any community forestry program, provide the foundation for most of the community forestry programs in South Dakota. These volunteer tree boards perform a wide variety of functions, including development of local tree ordinances, preparation of annual work plans and planning and implementing planting, pruning, and removal projects. They also provide information and education to local citizens, secure and administrate grant funds and conduct Arbor Day activities. At the present time there are 59 known tree boards across the state.

During FY 2003 service foresters provided 80 technical assists to 40 different communities in South Dakota. Another 225 tree planting and care assists were provided to individuals, organizations, and agencies around the state. As of the end of fiscal year 2003, 115 of South Dakota's 313 incorporated, and other active communities can be classified in one of four levels of urban & community forestry involvement: project, formative, developmental, or sustained. A **project** level community is receiving assistance with project activity only. In **formative** level communities, discussions or networking with community leaders about beginning a program have begun. A new tree board or tree ordinance may be in place or an initial community forest assessment conducted. **Developmental** programs have policies and ordinances developed or revised with tree inventories conducted and management plans in place. **Sustained** communities have an organized community forestry program and are functioning on their own with ongoing funding and management.



**FY 2003 Community
Developmental Levels**

**Total South Dakota
Communities Assisted**

**South Dakota
Communities Classified**

Project	6	58
Formative	7	20
Developmental	18	7
Sustained	<u>48</u>	<u>28</u>
Total =	79	113

The division continues to work to provide much needed outreach assistance to the Native American communities in the state. Plans are being formed for a \$13,000.00 cost-share project on the Standing Rock Indian Reservation. This project will help raise homeowner awareness along with assisting in vegetation management guidelines to help reduce wildfire risk areas.

The summer of 2002 was extremely hard on some of South Dakota's small communities. Tornadoes and strong storms did great damage to private and public properties and resources including trees. Among the hardest hit was the town of Sinai. The tree planting phase of the Division's Sinai re-greening project was completed in FY 2003. Approximately 100 bare – root trees were planted along the streets of Sinai. A number of Sinai residents, school students, businesses, and state and local governments donated trees, labor, and/or funding. The community of Sinai continues to maintain the newly planted trees and is also working on becoming a Tree City USA.

Also, interest in establishing multi-purpose community windbreaks, or greenbelts, has been very strong. The division is working with communities, the State Department of Transportation, South Dakota State University, the State Game, Fish & Parks Department, local county highway departments, local conservation districts and Planning & Development Districts to see that as many of these tree plantings as possible and feasible are installed.

Also included are measurements of big trees and their nominations to the South Dakota Register of Big Trees in cooperation with the National Big Tree Program administered by the American Forests organization of Washington, DC. A total of 255 trees of 57 different species are recorded on the Big Tree Register.

South Dakota continues to maintain two trees recognized as national champions: a Russian-olive located near Rapid City and a Black Hills spruce (our state tree) near Lead. However, the largest tree in South Dakota is a large cottonwood located near Springfield in Bon Homme County. The tree is 31'2" in circumference with a height of 120 feet, a crown spread of 87 feet, and a point score of 516.

Dr. John Ball, South Dakota State University, Brookings, made 20 other presentations in South Dakota on various aspects of tree management. Topics at other conferences and events included tree and shrub selection, identification and care, animal damage, and tree risk management. These presentations drew another 1,220 people and over 3,000 seat hours. In addition, over 10 Public Television presentations drew TV audiences interested in tree care, sweating nursery stock, Dutch elm disease management, transplanting with a tree spade and tree pest management.

A portion, approximately 40 percent, of Dr. Ball's salary and operating expenses are provided through the RC&F Division's Urban & Community Forestry Assistance. Dr. Ball's workshops and presentations are broken down as follows:

<u>Conference/Event</u>	<u>Location</u>	<u>Topic</u>	<u>No. of Participants</u>
Today's Ag TV Presentations	Brookings	6 Segments	Public TV
Garden Line TV Presentations	Brookings	Tree Care	Public TV
SD Hwy. Dept. Workshops	Pierre	Tree Appraisal	29
SD Arborists Workshop	Hot Springs	Tree Climbing Safety	23
SD Arborists Workshop	Pierre	Felling	27
SD Arborist/Nursery Conference	Sioux Falls	Forest Pest Update	67
SD Golf Course Super Conf.	Sioux Falls	Tree Care	132
Master Gardener Training	Madison/Rapid	Tree Care & Selection	54
Garden Expo	Sioux Falls	Tree Planting	145
Pesticide Applicators Recert.	5 Locations	Tree Insects and Mites	296
Logger Education	Spearfish	Mountain Pine Beetle	95
Tree Care Workshop	Pierre	Shrub & Vines	18
Hamlin Co. Conservation Dist.	Castlewood	Shelterbelt Trees	23
Codington Co. Conservation Dist	Watertown	Shelterbelt Trees	22
Union Co. Ext. Workshop	Dakota Dunes	Deer Protection	33
Brown Co. Ext. Workshop	Aberdeen	Pruning	62
Minnehaha Co. Ext. Workshop	Sioux Falls	Tree Selection	25
Tree Care Workshop	SDSU	Tree Selection	22
Tree Care Workshop	Rapid City	Landscape Design	29
Tree Care Workshop	Rapid City	Tree Selection	118



U&CF Challenge/Sub-Grant Program

Through the Urban & Community Forestry Program, the division provides technical and financial assistance to our communities. A portion of the division's annual allocation of Urban and Community Forestry Assistance funds is awarded to local governments and community volunteer service organizations in the form of focused cost-share grants. The grants are used to fund tree planting projects which provide benefits to the general public, solve a specific urban and community forestry problem, demonstrate the importance of trees in our communities, and challenge other organizations to plan and implement similar projects. The community or service organization must match the grant funds on a 50-50 basis. This has traditionally been accomplished through the volunteer labor and donated supplies that are needed to properly plant, mulch, and otherwise maintain the trees until they

are established. In 2002, the South Dakota Urban and Community Forestry Council made the decision to target sub-grant funding toward specific projects that would advance the missions of the South Dakota and federal urban and community forestry programs. In FY 2003, four targeted projects were selected for sub-granting: **1) The Sinai Re-Greening Project in Sinai, SD, 2) The Watertown Uptown Revitalization Project, 3) The South Dakota Community Forest Inventory Project, and 4) The South Dakota Mini-Arboretum Project.** A synopsis of each project follows:

1. **Sinai Re-Greening Project**

On July 28, 2002 around 2:30 pm the community of Sinai, SD was shaken by rain, hail, and high winds. The storm tore through the small town just south-west of Brookings, SD leaving downed trees, damaged houses, and crops.

On April 28, 2003, an effort to initiate the establishment of a new community forest for the community of Sinai began. This situation offered an opportunity to create a community forest that utilizes state of the art knowledge and techniques that will optimize the benefits that a well designed community forest can provide. Approximately 100 bare – root trees were planted along the streets of Sinai. A number of Sinai residents, school students, businesses, and state and local governments donated trees, labor, and/or funding.

2. **Watertown Uptown Revitalization Project**

The City of Watertown is located in northeastern South Dakota along the Big Sioux River. Watertown is in the process of renovating and revitalizing its historic uptown district. A multi-faceted project did commence in 2002, which offered a new rejuvenated streetscape for Uptown Watertown. That streetscape included landscaping, different species, and sizes of trees, historic looking lights, artwork, and renovations to some of the buildings. The Design Committee which had outlined the new streetscape, felt strongly that the trees added to their main corridor would be a tremendous visual enhancement. A National Arbor Day Foundation survey revealed that more than 80% of people prefer to shop in a nicely landscaped area.

3. **South Dakota Community Forest Inventory Project**

In FY 2003, the contract written with Davey Resource Group of Ohio to provide an internet community forest inventory system was continued. With this system, South Dakota will be able to provide a standardized, user-friendly community forest inventory system for use by small communities. RC&F has targeted a representative sample of all community size classes and U&CF program developmental levels. Inventories were completed in Clark, Sturgis, Chamberlain, and Box Elder. Inventories will be continued in FY2004 with several more communities being initiated.

4. **South Dakota Mini-Arboretum Project**

This project has been underway for several years, and mini-arboretums are being established in Spearfish, Pierre, Yankton, Chamberlain, Aberdeen, Kadoka, and the Journey Museum in Rapid City, SD. Progress is becoming visible with funding from the division helping to make significant progress. In FY 2003, design work and planting was done in the Journey Museum Arboretum, Aberdeen Arboretum and the Yankton Arboretum. When finished, these arboretums will give the public a look at which tree species grow in various parts of South Dakota, what size they can attain, and what they look like.

Forest/Timber Management

Division of Resource Conservation and Forestry service foresters wrote or approved 9 forest management plans in FY 2003 covering 993 acres. All of the plans prepared or approved by service foresters were forest stewardship plans.

Service foresters provided 258 forest management assists to various landowners, businesses and other agencies. Written prescriptions for 37 timber stand improvement projects were prepared, and when completed, will result in the improvement of 646 acres of timber and hardwoods. Fieldwork was completed in preparation for 34 non-commercial timber stand improvement projects covering 526 acres. Seven of the projects, covering 280 acres, were approved for cost-share assistance through the Stewardship Incentives Program (SIP), one project covering 7 acres have applied for cost-share through the Forestry Incentives Program (FIP), and 26 projects covering 239 acres applied for cost-share through the bark beetle program.

Pre-commercial thinning was completed on 11 projects involving 337 acres of forestland: one project covering 10 acres received cost-share under FIP, and 6 projects covering 234 acres were cost-shared by SIP. Thinning under the bark beetle cost-share program was completed on four projects covering 93 acres.

Field work was completed for three timber sale on 465 acres of private land. Timber sales were completed on two private properties covering 25 acres and including 58 thousand board feet of timber. Division staff reviewed and approved appraisals for the Flynn Creek timber sale in Custer State Park.

Tree planting was completed on 1 acre of forest land. Division service foresters referred 15 requests for assistance to consulting foresters.



Overstocked Stand Prior to Thinning



Thinned Stand

Forest Health Management



Forest health management in South Dakota encompasses a wide array of growing conditions, management practices, and host species. Insect and disease pressures and priorities differ among commercial forest, agroforestry (windbreaks and shelterbelts) and the urban and community forests. Service foresters, along with the Forest Health Specialists, provided more than 350 assists to private landowners. The Forest Health Specialists, along with service foresters, provided another 780 assists to cooperative extension educators and conservation district personnel. The level of assistance was very high for some problems, particularly bark beetle infestations in the Black Hills, where extensive sampling was required to delineate infested pockets of trees. In other

cases, services consisted of a disease or insect problem diagnosis and control recommendation for landowners.

The FY 2003 gypsy moth monitoring program was, as in past years, conducted as a cooperative effort with the USDA Animal and Plant Health Inspection Service (APHIS) and the South Dakota Cooperative Extension Service. The gypsy moth is a defoliating insect that was introduced into New England from Europe in the mid 1860s. It has spread since then into most deciduous forests in eastern United States and is now established in portions of Wisconsin and Minnesota. The feeding by the insect results in extensive tree mortality. The large masses of moth caterpillar also become a nuisance to campers and result in reduced park and campground visitation. There were 784 traps retrieved and these yielded 12 adult gypsy moths captured in 9 traps. The gypsy moths were collected from campgrounds in the Black Hills as well as a campground and highway rest area in eastern South Dakota. Infested nursery stock was also identified coming into the state from Iowa. The southeastern corner of the state, where the stock was delivered, as well as campgrounds where moths were captured this year will be more intensively trapped in 2004.

The gypsy moth is not the only invasive insect that the Division has assisted in monitoring. The banded elm bark beetle, an Asian borer that feeds in elms and may be a carrier of Dutch elm disease, was first identified in the United States in April 2003. The insect has been collected from traps in Rapid City and from elm logs in Brookings. It may be present throughout South Dakota, as well as many other plains states, yet was not detected until recently. The Division will do further monitoring in coordination with the surrounding states to determine the threat potential of this insect. The Division is also alerting nurseries, conservation districts, communities and landowners about the potential threat of another recently introduced insect, the emerald ash borer. This Asian insect has infested thousands of acres of forests in southeastern Michigan and northern Ohio and has been detected in several other locations. The emerald ash borer primarily infests and kills green ash in this country, but will also infest black and white ash. Since many of South Dakota's windbreaks are planted in green ash and this same species is the most common city street tree in the state, the potential damage from an infestation of this insect is very high. The Division will educate the public on identifying this pest as well as cooperate with APHIS in monitoring incoming stock to prevent the accidental introduction of this pest to our state.

The mountain pine beetle (MPB) program, in response to the epidemic in the Black Hills region of South Dakota, continues to yield positive results. A comprehensive, long-term plan is being developed to protect private lands adjacent to National Forest land and those forests that have been affected by fire. The epidemic, now in its 8th year shows no signs of decreasing. The number of trees killed now exceeds the losses of the 1970s epidemic, more than 450,000 trees, and has become the second

largest recorded infestation. The division has continued its MPB cost-share program to assist state and private land managers in the Black Hills area. Cost-share for individual trees has been set at 50% of the lowest of three bids, not to exceed \$300 per tree. A cost-share program for thinning high-risk stands has also been established.

The pine engraver beetle has also been a major concern of landowners this year. The population is reaching near epidemic proportions in some parts of the Black Hills due to a number of factors including snow and wind damage, hail and fires. The Division conducted a mass-trapping program of two mills, Pope & Talbot and Rushmore Products, to reduce the potential for pine engraver beetles emerging from infested logs and infesting trees outside of the mills. The trapping program was very successful with more than 200,000 beetles captured in traps placed around each mill. Another successful mass trapping program was conducted at the Belle Fourche Country Club. The club had removed many infested trees during last winter but had not disposed of the slash. The slash makes an excellent breeding ground for the engraver beetles that then can spread to infest nearby healthy trees. The Division conducted a mass trapping on the club to reduce the spread of the insects from the slash to the trees. The program captured more than 30,000 beetles in traps that were monitored throughout the season.

A major and continuing concern was drought. Many areas of the state are on their second and third year of drought conditions, which is beginning to show in the trees. There has been an increase in tree mortality, particularly blue spruce, either directly or indirectly related to drought.

Forest Inventory Analysis (FIA) Program

The FIA program collects, analyzes, and reports information on the status and trends of America's forests. Information is collected on how much forest exists, who owns it and how it is changing, as well as how the trees and other forest vegetation are growing and how much has died or has been removed in recent years. This information can be used in evaluating wildlife habitat conditions, assessing the sustainability of ecosystem management practices and supporting planning and decision-making activities undertaken by public and private enterprises. The FIA program combines this information with related data on



insects, diseases and other types of forest damaging agents and stresses. This is done to assess the health condition and potential future risks to forests. The program also projects what the forests may be like in 10 to 50 years under various scenarios. This information is essential for evaluating whether current forest management practices are sustainable in the long run and whether current policies will allow future generations to benefit from the many uses that America's forests provide.

There are five primary FIA regions across the lower 48 states. South Dakota is part of the 11 state North Central Region administered by the North Central Field Station located in St. Paul, MN. South Dakota chose to conduct their own inventory, and contracted the work to a private timber management consulting firm.

In 2001 the State of South Dakota received \$77,183.00 from the US Forest Service, North Central Research Station Forest Inventory Analysis Unit, to inventory a total of 88 FIA plots. This includes 79 Phase 2 (forest inventory) plots and 9 Phase 3 (forest health) plots. Approximately 60% of these plots are located in the Black Hills region. The state contracted out the fieldwork to a private forestry consultant. The field crews completed the inventory in early Nov. 2001. The data was analyzed and

processed in the fall of 2002. North Central Research Station released the report for the 2001 inventory in January 2003.

In 2002 the State of South Dakota received \$84,000.00 from the US Forest Service, North Central Research Station Forest Inventory Analysis Unit, to inventory a total of 117 inventory plots. This includes 100 P2 (forest inventory) plots 5 P3 (forest health & inventory) plots and 12 Ozone (sampling region) plots. Approximately 60% of these plots are located in the Black Hills region. The state again contracted out the fieldwork to a private forestry consultant. The field crews completed the inventory in October 2002. The data was analyzed and processed in the summer of 2003. A preliminary report was issued for comments on Sept. 2003 and the final report should be released by January 2004.

In 2003 the State of South Dakota received \$84,363.00 from the US Forest Service, North Central Research Station Forest Inventory Analysis Unit, to inventory a total of 104 inventory plots. This includes 85 P2 (forest inventory) plots 7 P3 (forest health & inventory) plots and 12 Ozone (sampling region) plots. Approximately 60% of these plots are located in the Black Hills region. The state again contracted out the fieldwork to a private forestry consultant. As of Nov. 1st 2003 the consultant has completed the inventory. Data has been sent to North Central and are awaiting federal Q & A field checks.

For the 2004 field season the State of South Dakota plans contracting the fieldwork to a private consultant. There will be 76 P2 (forest inventory) plots, and 12 ozone plots. This year North Central Research Station will be solely responsible for collecting data for the P3 (forest health) plots. There is only one P3 plot this cycle to be inventoried.

Economic Action Program



The Economic Action Program (EAP) provides the opportunity to help businesses and communities realize the economic potential of under utilized wood, wood waste, and non-traditional forest products. EAP National Fire Plan funding encourages utilization of small diameter material to reduce the threat of catastrophic fire.

In FY 2003, division activities focused on utilization of eastern red cedar in western and south central South Dakota. A contractor completed an inventory of the forest resources in an eight county area in the south central part of the state within a ten mile corridor of the Missouri River. Technical and cost/share assistance was utilized by landowners who are trying to develop businesses and markets for products made from small diameter wood (cedar). Cost/share assistance for thinning was also provide to landowners interested in reducing the threat of fire.

Black Hills National Forest Phase II Amendment

The Black Hills National Forest is developing a major Amendment to its 1997 Revised Land and Resource Management Plan. The State of South Dakota has obtained Cooperating Agency Status to provide technical expertise in the development of this amendment. The Department of Agriculture is playing the lead role with Secretary Gabriel as the principle liaison in this endeavor. The Secretary has delegated the coordination of the cooperating agency process to the Division of Resource Conservation and Forestry.

Other state agencies that have taken an active role in the process include the Departments of Game, Fish, and Parks, Environment and Natural Resources, Labor, Tourism, and Transportation.

The State has invited county governments and conservation districts in the area of the Black Hills National Forest to join the process as cooperating partners. Cooperating Agency Status was accepted by County Commissioners in Lawrence, Meade, Pennington, and Fall River Counties and Lawrence, Pennington, Custer, and Fall River Conservation Districts.

Cooperating Agency Status allows participating agencies to review, comment, and provide supporting information in every aspect of the amendment development process.

Conservation Programs

Coordinated Soil and Water Conservation (CSWC) Grants

During the 1992 legislative session, the South Dakota Coordinated Soil and Water Conservation Plan was adopted. One provision of the plan was the establishment of a grant fund to be used by conservation districts to address local natural resource needs.

During FY 2003, 9 grant applications were received. The 5 conservation districts that received funding are listed below:

<u>District</u>	<u>Grant Award</u>	<u>Match</u>	<u>Project Objective</u>
Lawrence	\$154,091	\$72,688	Black Hills Fire Rehabilitation
Mellette	\$9,500	\$7,160	Little White River Watershed Assessment
Hand	\$3,100	\$536,112	Jones/Rose Hill Lakes Watershed Improvement
Perkins	\$60,000	\$15,000	Northwest Area Forester
Hamlin	\$86,900	\$81,737	Tallgrass Prairie Conservation Initiative
TOTAL	\$313,591	\$712,697	



Conservation District Revolving Loan Fund

The Conservation District Revolving Loan fund was established by the South Dakota Legislature during 1949. Loans can be made to conservation districts or watershed districts for securing, by purchase or otherwise, necessary equipment, trees and other plant materials and supplies needed to further their programs. Loans are made at 3 percent interest per annum. Loans made in FY 2003 were:

<u>Conservation District</u>	<u>Loan Amount</u>	<u>Purpose</u>
Deuel	\$ 7,700	Pickup
Harding	\$ 12,000	No-till drill
Walworth	\$ 3,000	No-till drill
<u>Lincoln</u>	<u>\$ 4,500</u>	Tree Planter
Total	\$ 27,200	

Range Management



The purpose of the Prairie Rangeland Conservationist position is to provide technical assistance to producers for range monitoring, grazing plans, range development and other conservation planning.

The Prairie Range Specialist is assigned to the south central part of the state, but provides technical assistance statewide as needed. As well as working with individual producers and landowners, the Rangeland Conservationist works with other agencies and organizations in conservation planning

and projects. An example of this is the Management Intensive Grazing Demonstration Project funded by a Conservation Commission grant. Six demonstration sites were completed and are being maintained on 6352 acres of rangeland.

The Rangeland Specialist conducts outreach and educational projects. This includes the Society for Range Management's Youth Range Camp serving 50-60 young people interested in rangeland judging and plant identification. Other educational outreach in school programs have addressed rangeland plants and conservation to local 4-H groups, local grade schools, Environmental Fairs, Kid's Fairs, and after-school programs serving 250 to 300 children in grades K-6 in 2003.

Type of Assistance 2003	Affected Acres 2003
Rangeland Inventories	1500
Conservation Planning Maps	2000
Grazing Assistance	1200
Rangeland Monitoring	300
Planning Assistance	6352
Total Acres	11352

Wetlands Program

In FY 2003 the division received an EPA grant in the amount of \$45,791, which is being used to demonstrate the environmental and social benefits of adding grass and woody buffers adjacent to wetlands. Wetland buffer demonstration sites are proposed or being installed at three locations near Brookings, SD and Sioux Falls, SD. Landowners are excited about installing the buffers and having their land used for wetland education purposes. We are also working with NRCS, SDSU and several farm organizations to explore the development of a wetland hydrology model for use in the field.

Assistance to Conservation Districts

The division is currently providing the following conservation program services:

- Administration of Coordinated Soil and Water Conservation Grants
- Administration of Conservation District Revolving Loan Fund
- Forestry technical assistance to conservation districts (covers all 7 Natural Resource Areas of the state)
- Range Specialist assigned to Prairie Natural Resource Area
- Monitor supervisor elections and maintain supervisory history
- Resource Conservation Speech Contest
- Respond to requests for assistance (legal questions, accounting and financial record keeping, grant and loan information, tree planting and personnel issues)
- Maintain a conservation district telephone directory
- Special projects
- Conservation district financial training (QuickBooks) and grants management and resource protection planning training when requested
- Participate at conservation district and South Dakota Association of Conservation Districts (SDACD) functions (area meetings, annual convention, board meetings, advisor on SDACD committees, SDACD Employees board advisor, etc.)
- Maintain district records, reports, and history (financial, election, minutes, progress, grants and loans, etc.)

Information and Educational Activities

Smokey Bear and Wildland Fire Prevention

A total of 14 fire prevention and Smokey Bear programs were presented by service foresters to school classes, service organizations and other groups around the state, including appearances by Smokey during State Fire School and at various events. Smokey Bear fire prevention materials valued at approximately \$5,000 were distributed by service foresters to schools, service organizations, fire departments, and many others who can use and learn from them. Materials were also distributed at the South Dakota State Fair in Huron, Dakota Fest in Mitchell and other major public events.

Smokey Bear and Woodsy Owl Poster Contest 2003 Winners

The 2003 Woodsy Owl Poster Contest was co-sponsored by the Keep South Dakota Green Association (KSDG) and the South Dakota Federation of Garden Clubs (SDFGC). Entries were accepted in five competition divisions. First place winners received \$25 and certificates of achievement; second place winners received \$15 and certificates of achievement; third place winners received \$10 and certificates of achievement; honorable mentions received certificates of achievement. The winners selected by representative judges from the SD Dept. of Agriculture, Resource Conservation & Forestry Division, KSDG and SDFGC are:

First Grade Competition Division

First Place: Tia Goebel, Custer, SD
Second Place: Kiara Marie Anderson, Rosholt, SD
Third Place: Holly Hamlin, Highmore, SD
Honorable Mention: Anthony Williams, Custer, SD
Honorable Mention: Matthew Preszler, Menno, SD

Second Grade Competition Division

First Place: Lincoln Lane, Groton, SD
Second Place: Tracy Hague, Highmore, SD
Third Place: Erica Schuster, Groton, SD

Third Grade Competition Division

First Place: Brooklyn Ihlen, Tea, SD
Second Place: Meghan Dohman, Groton, SD
Third Place: Aren Jennings, Tea, SD

Fourth Grade Competition Division

First Place: Kara Baloun, Highmore, SD
Second Place: Logan Cowan, Highmore, SD
Third Place: Taylor Huwe, Webster, SD

Fifth Grade Competition Division

First Place: Jennifer Gullickson, Howard, SD
Second Place: Perrin Thomas, Lennox, SD
Third Place: Nina Martinez, Custer, SD
Honorable Mention: Hannah Myers, Onida, SD



Cash awards were provided courtesy of the KSDG association & the SDFGC.

Urban and Community Forestry

In FY 2003 service foresters and the urban forestry specialist made 245 presentations to school classes and civic groups on Arbor Day, Tree City USA, and other urban forestry subjects. 3 workshops on tree planting and care were presented. There were 4 interviews with Dakota Farm Talk Radio Program and 17 TV, radio and newspaper spots on Arbor Day, tree planting and care were also produced.



Gregory, SD Tree Workshop

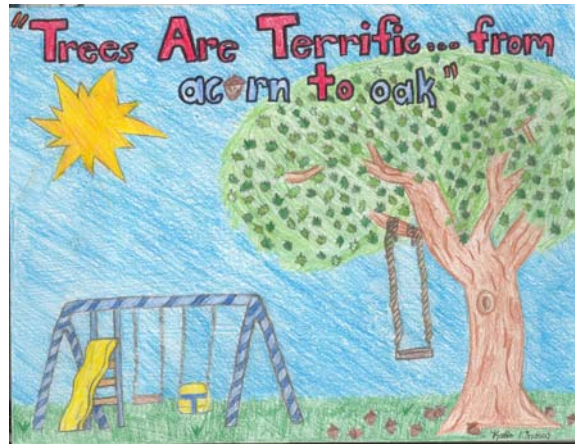
Arbor Day

The last Friday in April was established by the 1947 State Legislature as South Dakota's official Arbor Day. The law was repealed in 1995 as part of an omnibus elimination of laws that restrict or pertain to state education, but re-established by the 1998 Legislature. Arbor Day traditionally falls on the last Friday in April. In FY 2003, that day was April 25th. It is the one day set aside each year to commemorate and plant trees for the many benefits they provide and the impact they have on our environment. On or around that date, division service foresters provided a total of 63 presentations to school classes, service clubs and other groups on the importance of planting and properly caring for our rural and urban trees, and of celebrating Arbor Day.

The Division of Resource Conservation and Forestry, in cooperation with the South Dakota Association of Conservation Districts, the Keep South Dakota Green Association, and McDonald's Restaurants of South Dakota, sponsored the 2003 Arbor Day Essay Contest. This was the 26th annual competition that is open to 5th and 6th grade students. A total of 2065 essays were entered from 45 of 69 conservation districts. The first place state winner, **Jordan Kelly**, a sixth grader from Wall, SD in East Pennington County Conservation District, received a cash award of \$100 and a handsome engraved plaque. In addition, Jordan's school, **Wall Public School**, received \$150 to purchase educational supplies or equipment. The second place winner, **Jennifer Orth**, a fifth grade student from Herreid Elementary in Campbell County Conservation District was awarded \$75 and an engraved plaque. **Erica Blom**, a sixth grader and the third place winner from Netherlands Reformed School in Douglas County Conservation District was awarded \$50 and an engraved plaque. Courtesy of Keep

South Dakota Green Association, every student who entered the contest received a packet of honeylocust tree seeds and instructions on how to grow their own trees.

The division also cooperated with the National Arbor Day Foundation to sponsor the tenth annual Arbor Day Poster Contest, open to fifth grade students. Also cooperating at the local level and providing the prize money was the South Dakota Arborists Association and the Dakota Society of American Foresters. The theme of the 2003 contest was "Trees are Terrific – from acorn to oak!" in celebration of the 131st anniversary of the founding of Arbor Day. The first place winner, **Katie Lindsay** who attends classes at St. Thomas Aquinai School in Madison, was awarded \$100 and an attractive certificate of achievement. **Nate Kirby**, the second place winner from Tri-Valley in Colton, received a \$75 cash award and a certificate of achievement. Third place winner, **Hannah Schaupp**, of Custer Elementary in Custer, was awarded \$50 and a certificate. Katie's first place poster was forwarded to national competition, but was not selected as the national winner.



2003 Arbor Day Poster Winner

Tree City USA

Tree City USA is a community improvement and national recognition program for towns and cities that meet established standards and effectively manage their public tree resources. The program is sponsored by the National Arbor Day Foundation and the US Forest Service at the national level, and by the South Dakota Division of Resource Conservation and Forestry at the state level. To qualify for Tree City USA designation, a community must meet four standards:

1. Organize a community tree board to oversee the urban & community forestry program
2. Establish and enforce an effective community tree ordinance
3. Implement a community forestry program funded by a minimum of \$2.00 per capita
4. Celebrate Arbor Day with an official proclamation and organized observance

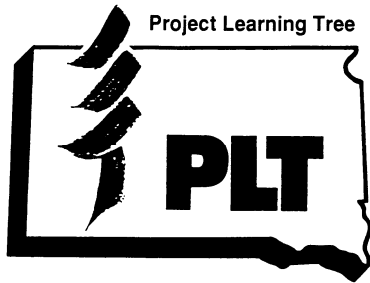
South Dakota Division of Resource Conservation and Forestry foresters re-certified 30 active Tree City USA communities for work done in 2002. South Dakota's 2002-2003 Tree City USA communities with first year of recognition, population, 2002 forestry budgets, and per capita spending are as follows:

Tree City USA	Year First Recognized	Population	Urban Forestry Budget (2002)	Per Capita Spending
Aberdeen	1980	24,658	\$256,285.11	\$10.40
Andover	1986	99	\$183.44	\$2.00
Belle Fourche	1991	4,565	\$9,130.00	\$2.00
Brookings	1982	18,501	\$271,005.00	\$14.60
Burke	1982	676	\$2650.00	\$4.00
Clark	1981	1,285	\$53,987.47	\$42.00
Deadwood	1992	1,380	\$33,527.50	\$24.30
Dell Rapids	1984	2,980	\$25,140.00	\$8.40
De Smet	1997	1,164	\$5,100.73	\$4.40
Ellsworth Air Force Base	1999	7,400	\$218,777.00	\$30.00
Gregory	1984	1,342	\$3,200.00	\$2.40
Hartford	1992	1,844	\$4,418.00	\$2.40
Henry	2002	268	\$3,168.00	\$11.80
Huron	1982	11,893	\$39,062.78	\$3.30
Lead	1987	3,027	\$177,816.27	\$59.00
Madison	1980	6,540	\$26,159.02	\$4.00
Mitchell	1980	14,558	\$95,174.00	\$6.50
Pierre	1983	13,876	\$109,024.17	\$8.00
Platte	1995	1,367	\$2,875.00	\$2.00
Rapid City	1980	59,607	\$274,207.00	\$4.60
Redfield	1990	2,897	\$36,560.96	\$22.00
Sioux Falls	1980	123,975	\$659,000.00	\$5.30
Sisseton	1982	2,572	\$6,105.00	\$2.40
Spearfish	1984	8,606	\$20,930.00	\$2.40
Spencer	1999	157	\$5,461.15	\$34.80
Sturgis	1983	6,442	\$79,121.65	\$12.30
Vermillion	1984	9,765	\$25,050.00	\$2.60
Watertown	1982	20,237	\$170,105.00	\$8.40
Winner	1984	3,137	\$12,883.40	\$4.10
Yankton	1983	13,528	\$67,067.90	\$5.00
Totals		368,346	\$2,693,175.55	\$345.40
			Average per Capita Spending	\$11.51

SOUTH DAKOTA LAND STEWARDSHIP SPOTLIGHT

The South Dakota Land Stewardship Spotlight is a program that recognizes landowners who are using best management practices on their rangeland, farms, and/or timber acres. A landowner is selected from nominations that are made by area foresters, local conservation districts, RC&D groups, and private landowners. The selected landowners are featured in a radio spot on Winner and Aberdeen radio stations. The landowner also receives a certificate of appreciation from the SD Department of Agriculture and has an announcement published in their local newspaper. The program currently covers 25 counties in central South Dakota and averages 8 landowners a year.

Project Learning Tree



Project Learning Tree (PLT) is an award-winning environmental education program designed primarily for teachers and other educators working with students in pre-kindergarten through grade eight. Special modules, or teaching units, are available for high school level teachers. PLT uses the forest as a “window” into the natural world, helping young people gain an awareness and knowledge of the world around them, as well as their place within it. Children learn **how to think**, rather than what to think about our complex environment, and they have fun learning as they and their teachers work with any of the 93 action-oriented activities described in the *Environmental Education Pre K-8 Activity Guide*.

During FY 2003, one part-time PLT Coordinator, Dianne Miller, planned and coordinated workshops, classroom presentations, events and three Walk in the Forest Days to promote the PLT effort statewide. Dianne devoted an average of 25 hours per week (part time) to the PLT program. A total of 12 educator and facilitator workshops in South Dakota resulted in the training of 251 educators:

<u>Location</u>	<u>Type of Workshop</u>	<u>Instructor</u>	<u># of People Trained</u>
Spearfish, BHSU Pre Services Class	Basic Educator	Miller, Gray, Garbisch	72
Outdoor Education	Basic Educator	Miller, Gollhofer, Root	24
Forest Ecology	Secondary Educators	Miller	8
Custer, Ag Educators	Secondary Educators	Miller, Smith	20
Webster Ag Educators	Secondary Educators	Miller, Brown	11
American Creek School	Basic Educator	Miller, Ulsved	30
Sioux Falls	Basic Educator	Hines	15
Pierre Science Center	Secondary Educators	Miller	9
Advanced Fire and Forestry	Basic Educator	Miller, Gray, Coburn	16
Facilitators Training Workshop	Basic Educator	Miller	11
Custer State Park	Basic Educator	Miller, Gollhofer, Root	11
Spearfish	Early Childhood	Miller	12
Total Trained			239

The Project Learning Tree exhibit/table top display was featured at the South Dakota Retail Lumberman's Association Convention in Sioux Falls, a legislative social in Pierre sponsored by the Society of American Foresters, 2003 Math and Science Teacher's Association meeting in Huron, Kids Fair in Rapid City, Fun in Park event for kids in Spearfish, and various other sites promoting PLT.

The PLT Coordinator, service foresters and other facilitators hosted PLT activities at several Water Festivals for fourth grade students and their teachers. The Water Festivals were sponsored by the Department of Environment and Natural Resources and were held at Brookings, Rapid City, Pierre, Sioux Falls, Huron, and Vermillion. Educational displays for hands on activities were also held at the Boy Scouts Day Camp, Girl Scout Jam, an afternoon program for Spearfish third graders and demonstration of an educational computer forestry game and a talk about tree cookies at the Rapid City Kids Fair in April. A fun morning was spent with preschoolers making tree sacks and reading a tree story.

Three very successful Walk in the Forests events were held this past year. Over 400 fifth and sixth grade students walk in the forest to different stations to learn about trees and more about the job of a Forester. We also included a great station on Mt. Pine Beetles and fire.

South Dakota PLT provided lessons and activities for Outdoor Education majors at Black Hills State University to present for Arbor Day in Belle Fourche, Spearfish, Sturgis, Whitewood and Lead elementary schools. Across SD several schools hosted Arbor Day Events which included PLT activities including Tree Factory, Adopt a Tree, and Tree poetry.

Tree Farm

The Division of Resource Conservation and Forestry also participates in the American Tree Farm System. The South Dakota Tree Farm Committee is sponsored in part by the Keep South Dakota Green Association. Forty-nine Tree Farms were inspected that cover 12,591 acres of forestland and windbreaks; division service foresters completed 42 of the inspections. There were fifteen inspections of new Tree Farms. There are currently 171 Tree Farms in South Dakota covering 24,268 acres. Paul & Julie Schipke of Deadwood were chosen as the 2003 Outstanding Woodland Tree Farmers of the Year. Duane Steege of Wilmot was chosen as the 2003 Windbreak Tree Farmer of the Year. Service foresters from the division nominated Duane Steege for the award. The division also provides secretarial, and database administration services for the Tree Farm Committee.



Logger Education to Advance Professionalism (LEAP)



The Central Rockies Sustainable Forestry Education Program (CRSFEP) is an organization made up of professionals representing loggers, forest products industry, state forestry agencies, forest landowners, and natural resource educators from South Dakota, Wyoming, and Colorado. The mission of the organization is to develop, support, and provide a course curriculum to improve the knowledge and implementation of forestry practices. In 2003 CRSFEP became incorporated as a non-profit organization under section 501(c) (3) of the Internal Revenue Service tax code. This step will help the organization obtain grants, charge for services and contract with an administrator. Currently, the division is providing leadership to the organization by occupying the role of President.

Logger Education in South Dakota is a cooperative effort involving the Division of Resource Conservation and Forestry, South Dakota Cooperative Extension Service, Black Hills Women in Timber, the Black Hills Forest Resource Association, and the Black Hills National Forest. Workshops cover a wide range of forestry related topics including silviculture and forest ecology.

The division provided a grant to Black Hills Women in Timber to sponsor forest ecology training in 2003. The training provided four hours of classroom and three hours of field instruction to loggers, foresters, and landowners. The classroom and field sessions were held on different days due to inclement weather. Nevertheless, both sessions attracted about 100 people.

Resource Conservation Speech Contest



*Left to Right: Bob Sargent (East River Electric),
Rebecca Lutz, Bridget Nordquist & Neal Konda*

Each year for the last 42 years the Division of Resource Conservation and Forestry has sponsored a Resource Conservation Speech Contest in cooperation with the South Dakota Association of Conservation Districts (SDACD) and East River Electric who provided \$1,200 in scholarships.

Any South Dakota student in grades 9-12, is eligible to compete. In 2004, the scholarships will be raised to \$2,300. The scholarships will be contributed by South Dakota Rural

Electric Association, East River Electric Power Cooperative, and Rushmore Electric Power Cooperative. Five place winners are selected each year. The

scholarships are paid to any college, university or accredited vocational technical school in the state of South Dakota chosen by the winners.

The theme for the 2003 contest was "Conservation – Our Heritage Depends on It." All contestants participated in a local contest that was coordinated by the local conservation district. Stage two was an area contest held at seven locations around the state, corresponding to the South Dakota Association of Conservation Districts areas. The last stage was the State Final contest that was held in Pierre April 5, 2003.

Winning first place and a \$500 scholarship was Neal Konda, a sophomore at Sisseton High School, sponsored by the Roberts County Conservation District. He is the son of Frank and Dinah Konda of New Effington.

The second place winner, Bridget Nordquist, a senior at Britton-Hecla High School in Britton, was awarded a \$400 scholarship. She is the daughter of Terry and Anne Nordquist of Lake City and was sponsored by the Marshall County Conservation District.

Placing third and receiving a \$300 scholarship was Rebecca Lutz, a junior at Selby Area High School, sponsored by the Walworth County Conservation District in Selby. Rebecca is the daughter of Larry and Deb Lutz of Selby.

State Capitol Christmas Tree

In a cooperative effort with the South Dakota Department of Game Fish and Parks, RC&F division employees helped bring holiday cheer to Pierre by providing the State Capitol with a large Black Hills spruce Christmas tree. The Festival of Trees display in the State Capitol Building has become a tradition in South Dakota. The large spruce tree and many others grace the rotunda and hallways, and are enjoyed by the public from the Thanksgiving weekend through Christmas.

The large spruce was located in Marshall County by Lake City South Dakota on the Clear Lake Division of Parks lake access area. The tree was selected well ahead of time, cut, and transported to Pierre. Personnel of the Division of Parks, Division of Resource Conservation and Forestry, and the Division of Wildfire Suppression all assisted in the cutting, loading and transporting of the tree.

Black Hills spruce (*Picea glauca* var. *densata*), South Dakota's official state tree, is fitting to be our state Christmas tree. The large tree was 30 feet in height and greeted the public as they entered the Capitol Building rotunda.



Black Hills (White) Spruce
Picea glauca var. *densata*

Resource Conservation & Forestry Fire Assistance



Fire Rehabilitation Projects



South Dakota has experienced several years of drought and increased large fire activity. In the summer of 2002 there were 3 large fires in the Black Hills that the Division of Resource Conservation and Forestry was involved in. Those fires were the Grizzly Gulch Fire, the Little Elk Creek Fire, and the Battle Creek Fire. Post-fire rehabilitation work was conducted on all 3 fires.



The Grizzly Gulch Fire burned 11,589 acres, of which 6,292 acres were privately owned. The Division participated in the Burned Area Emergency Rehabilitation team and managed the rehabilitation efforts on the private lands under the NRCS Emergency Watershed Program. Contour felling on 143 acres and aerial re-seeding of grass on 102 acres of severely burned lands were the two major projects.

There were two major rain events over the burned area prior to installation of the contour felling and the city of Deadwood experienced severe flooding due to runoff. There was another major rain event following installation of the contour felling practice and the city did not experience any unusual flooding.

Aerial re-seeding was successfully completed in the early fall of 2002. The seeded areas now have established stands of native grasses. The Little Elk Creek Fire burned 660 acres, nearly all privately owned, along the front range of the Black Hills in the Little Elk Creek drainage. The division provided advice to private landowners on tree salvage, insect and disease control, erosion control, grass re-seeding and tree planting. Tree planting was cost-shared through a grant from the South Dakota Conservation Commission in cooperation with the local conservation districts.

The Battle Creek Fire burned 12,450 acres, of which 3,330 acres were privately owned. The division provided technical assistance to the private landowners on tree salvage, insect and disease control, grass re-seeding, weed control, erosion control, and tree planting. Tree planting was cost-shared through a grant from the South Dakota Conservation Commission in cooperation with the local conservation districts.

Project Partners:

- Division of Resource Conservation and Forestry
- SD State Conservation Commission
- Lawrence Conservation District
- Elk Creek Conservation District
- Pennington Conservation District
- Natural Resources Conservation Service

RC&F FIRE ASSISTANCE – FY 2003

FY 2003 was an active year for wildfires across the West, and included some very large fires that threatened Lead, Deadwood, Rockerville, and many subdivisions in the Wildland-Urban Interface of the Black Hills. RC&F provided technical support and assistance in the suppression of many of these fires. In addition, RC&F sent personnel to assist with fires outside South Dakota and helped with prescribed burns. The following is a list of fires that RC&F personnel worked:

- Grizzly Gulch – Supply unit leader, Crew Boss Trainee, Information Officer
- Little Elk – Information Officer
- Whitewood Canyon – Crew Boss
- Red Point – Dispatch Recorder
- Pine Ridge Complex – Dispatch Recorder
- Merchen – Dispatch Recorder
- Parm – Dispatch Recorder
- Chediski (Arizona) – Information Officer
- Davis Fire (Oregon) – Information Officer
- Alkali West prescribed fire – Information Officer

Financial Assistance to Local Organizations

Summary of Grants Awarded by County, Program and Amount During State Fiscal Year 2003

U&CF = Urban & Community Forestry Sub-Grants, See Pages 11-12
CSWC = Coordinated Soil & Water Conservation Grants, See Page 17

<u>County</u>	<u>Grant Recipient</u>	<u>Program</u>	<u>Amount Awarded</u>	<u>Local Match</u>	<u>Total Project Cost</u>
Aurora					
Beadle					
Bennett					
Bon Homme					
Brookings	City of Sinai	U&CF	\$ 10,000	\$ 10,000	\$ 20,000
Brown	City of Aberdeen	U&CF	\$ 1,000	\$ 1,000	\$ 2,000
	City of Aberdeen	U&CF	\$ 4,000	\$ 4,000	\$ 8,000
	City of Chamberlain	U&CF	\$ 1,000	\$ 1,000	\$ 2,000
Brule					
Buffalo					
Butte					
Campbell					
Charles Mix					
Clark					
Clay					
Codington	City of Watertown	U&CF	\$ 5,000	\$ 5,000	\$ 10,000
Corson	Standing Rock	U&CF	\$ 13,000	\$ 13,000	\$ 26,000
	Reservation				
Custer					
Davison					
Day					
Deuel					
Dewey					
Douglas					
Edmunds					
Fall River	S.D. Veterans Home	U&CF	\$ 1,000	\$ 1,000	\$ 2,000
Faulk					
Grant					
Gregory					
Haakon					
Hamlin	Hamlin Conservation	CSWC	\$ 86,900	\$ 81,737	\$238,637
	District				
Hand	Hand Conservation District	CSWC	\$ 3,100	\$536,112	\$2,151,016
Hanson					
Harding					
Hughes	City of Pierre	U&CF	\$ 1,000	\$ 1,000	\$ 2,000
	Pierre Arboretum Signage	U&CF	\$ 1,320	\$ 1,320	\$ 2,640
Hutchinson					
Hyde					
Jackson	City of Kadoka	U&CF	\$ 1,000	\$ 1,000	\$ 2,000
Jerauld					
Jones					
Kingsbury					

<u>County</u>	<u>Grant Recipient</u>	<u>Program</u>	<u>Amount Awarded</u>	<u>Local Match</u>	<u>Total Project Cost</u>
Lake Lawrence	Lawrence Conservation District	CSWC	\$154,091	\$ 72,688	\$526,400
	City of Spearfish	U&CF	\$ 1,000	\$ 1,000	\$ 2,000
	Lawrence County Fire Restoration	U&CF	\$10,200	\$10,200	\$20,400
Lincoln Lyman McCook McPherson Marshall					
Meade	City of Sturgis	U&CF	\$ 5,000	\$ 5,000	\$ 10,000
Mellette	Mellette Conservation District	CSWC	\$ 9,500	\$ 7,160	\$ 67,500
Miner Minnehaha Moody Pennington	City of Baltic	U&CF	\$ 10,000	\$ 10,000	\$ 20,000
	City of Rapid City	U&CF	\$ 4,500	\$ 4,500	\$ 9,000
	Journey Museum	U&CF	\$ 1,000	\$ 1,000	\$ 2,000
Perkins	Perkins Conservation District	CSWC	\$ 60,000	\$ 60,000	\$141,000
Potter Roberts Sanborn Shannon Spink Stanley Sully Todd Tripp Turner Union Walworth Yankton Ziebach					
	City of Yankton	U&CF	\$ 1,000	\$ 1,000	\$ 2,000
TOTALS			\$384,611	\$828,717	\$3,266,593