

2007 SEMI-ANNUAL REPORT

IOWA DEPARTMENT OF NATURAL RESOURCES
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WALLACE STATE OFFICE BUILDING
DES MOINES, IOWA 50319-0034



Turkey Valley High School School standing by their tree that they planted through the TFK Planting Program in Jackson Jct, IA thanks to Fort Atkinson nursery.



INTRODUCTION

Trees For Kids and Trees For Teens are tree education and planting programs for elementary and secondary schools across the state of Iowa. The mission of these projects is, “to promote the value of trees to Iowa’s youth by providing educational information and opportunities for tree planting and care.”



HISTORY

The Iowa Department of Natural Resources (DNR) established Trees For Kids in 1990 to assist Iowa schools in celebrating Earth Week and Arbor Day. Between 1990 and 2006, an average of 7,000+ teachers annually have participated in Trees For Kids & Teens, working with over 915,350 students in Iowa. Trees For Kids/Teens has assisted in the planting of over 1,157,305 landscape-sized trees and seedlings in Iowa since 1990. Trees For Kids (TFK) materials focus on educating elementary aged students, while the Trees For Teens (TFT) counterpart materials focus on middle school and senior high school students.



GOALS

The goals of the Trees For Kids/Teens programs are:

- To provide all Iowa students the opportunity to learn about the value of trees.
- To develop and distribute high quality educational materials.
- To coordinate the program efficiently for all participants.
- To maintain and enhance broad-based private and public partnerships.



PARTNERS

The Trees For Kids/Teens program is a cooperative partnership between the following public and private agencies, organizations, and corporations:

- The Iowa Department of Natural Resources Bureau of Forestry (IDNR)
- Iowa Nursery and Landscape Association (INLA)
- Iowa Bankers Association (IBA)
- MidAmerican Energy
- Aquila
- Alliant Energy
- Iowa Society of American Foresters
- USDA Forest Service (USFS)
- Iowa State University Extension Forestry (ISU)
- Iowa Tree Farm Committee
- Trees Forever (TF)
- Modern Woodmen of America
- Iowa Woodland Owners Association



PROJECT IMPLEMENTATION 2007

The Trees For Kids and Teens Programs are coordinated by the Iowa Department of Natural Resources Division of Conservation and Recreation- Bureau of Forestry (DNR). The program coordinators were John Walkowiak, Land Protection Leader; Amy Oliver, Natural Resource Tech II; and Jessica Russ, Trees For Kids Intern.

This year's theme of 'Invasive Species that threaten Iowa natural resources. In December 2006, the Trees For Kids Intern, Jessica Russ was hired and began the initial planning and implementation stage for the 2007 Trees For Kids program. Partner organizations were contacted for assistance in writing and developing educational material. These people included conservation educators, Mark Vitosh (DNR), Gail Kantak (DNR), Jessica Russ (DNR), Mark Muller (Artist), Tivon Feeley (ISU) and John Walkowiak (DNR). Mark Muller worked with John in developing the education poster. Muller did the original artwork and poster layout for cost. Project assignments for developing educational activities and deadlines for the activities were established for each educator. Russ took the lead in developing background information and educational material development. Kantak, Vitosh, Feeley and Walkowiak contributed background articles and educational activities. Walkowiak, Oliver and Matt Brewer, Urban Forestry Technician II provided oversight on the project and assisted Jessica when needed.

Mailing lists of all eligible teachers and educators were assembled by Russ from information provided by the Iowa Department of Education. Mailing lists were organized into elementary and secondary teachers and educators who had interest in science and natural resources. Mailing lists were sorted by grade levels, subject matter and utility service areas.

The next phase of the project occurred during January and February 2007 when the educational materials were written, formatted and finalized by Russ. By utilizing the bidding from target small business printers and promotion firms, low bids were received for the printing of the educational booklets, materials and the poster from Iowa targeted small businesses. Agreements were finalized on price, quantity, delivery deadlines and delivery methods involving four (4) targeted small businesses that reside in Iowa.



PROJECT IMPLEMENTATION 2007



Ankeny High School Tennis boys and girls teams establish one of 3 Black Hills Spruces near the High School



Turkey Valley High School students help plant trees in Jackson Junction



Central Alternative instructor helping plant a tree with her students.

The DNR contacted IBA members, TF Committee leaders and INLA members in early April via a printed partner newsletter. The specially designed TFK newsletter and TFK poster were sent to 2,000+ partners (INLA, IBA, and TF) in order to remind them of their roles in the tree distribution process. Partners were encouraged to take a pro-active role in their communities. They were given suggestions such as making contact with their local schools, familiarizing others with TFK, helping their local schools with the purchase of a tree, or using TFK materials to supplement their own programs.

In late March, and continuing through May, the DNR led by Matt Brewer, Amy Oliver, Jessica Russ, Randy Cook, Aron Flickinger, Ryan Schlatter, John Walkowiak and inmates from the Rockwell City Correctional Facility assembled teacher packets and mailed to teachers and youth leaders across the state. The packets contained a 32 page TFK or TFT manual with articles and classroom activities, a four-color educational poster, a TFK-MidAmerican Energy pen, Aquila and Alliant Energy TFK pencils, a TFK-MidAmerican Energy wooden inch/metric ruler, a specially designed 20 Native Trees of Iowa tree identification booklet, and instructions on how to obtain a free landscape-sized tree for planting.

Teachers who wanted to plant a tree called Russ at the DNR from March to mid-May 2007 for the names and phone numbers of IBA and INLA members nearest them. The teachers were then instructed to contact the nurseries to select a landscape tree at wholesale cost. With an estimate of the final cost of their project, the teachers were to contact one of their local banks to fund the remaining cost of the tree. The decision to participate in individual projects was given to IBA and INLA members contacted. Generally speaking, teachers reported a high level of cooperation. Wholesale tree costs range from \$25 to \$300 depending on the size and species. The donations of these amounts were appreciated. From April-June teachers planted their tree(s) with their classes on school property or in public areas.

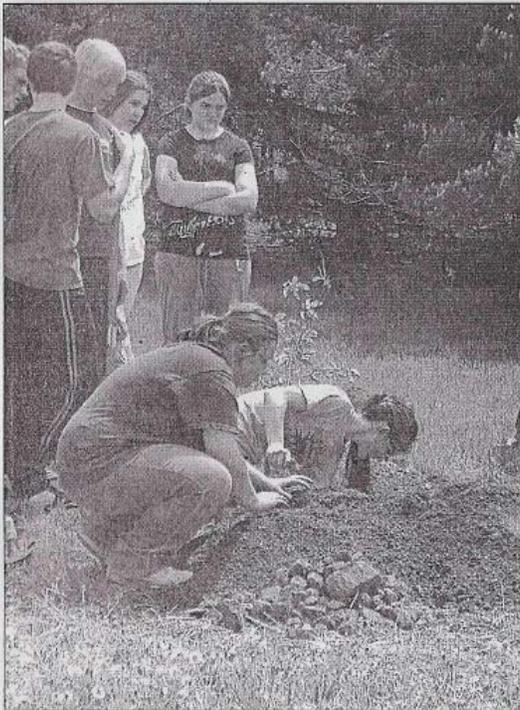


PROMOTION EFFORTS 2007

The DNR's Land Protection Leader, John Walkowiak, Urban Forester Randy Cook, and Natural Resource Technicians Amy Oliver and Matt Brewer, TFK Intern Jessica Russ lead the effort in promoting the TFK program in the Spring of 2007. They attended and had formal displays at the Iowa Science Teacher's Conference in October 2006 and Iowa Keepers of the Land Conference in November 2007. John, Amy and Jessica attended the INLA convention in January 2007. Nine Iowa Communication Network (ICN) programs on Tree Identification, How to Build a Tree, Tree ID, Forestry Heritage, Forest Ecosystems and How to Plant a Tree were completed with the assistance of Iowa Public Television K12 Connections reaching over 3,720 school children and teachers during the Winter-Spring of 2007. The TFK program also received printed publicity through general news releases. Iowa Outdoors magazine printed an update of the program and its activities. Several local news papers covered Trees For Kids demonstration plantings including the Sioux Valley News in Woodbury county below.

12 • Sioux Valley News • May 16, 2007

Free Trees for Outdoor Classroom



The students worked hard with shovels digging deep holes to plant the trees furnished by the DNR.



Mrs. Kirchgatter is holding up one of the trees as the students dig the hole the proper depth for planting.





DEMONSTRATION PLANTINGS 2007]

Location	Trees Planted	# Presentations	# Kids Involved
Backbone State Park	8	1	60
Turkey Valley High School	9	1	20
Floyd County Fairgrounds	12	1	25
Belle Plaine High FFA	5	1	20
Miller School Marshalltown	5	1	30
Amber City Park - Jones Co	27	1	10
Louisa Jr/SR High - Letts	5	1	30
Van Allen School - Chariton	3	1	10
Pence Elementary - Fairfield	3	1	5
Lucas Co Fairgrounds	7	1	7
Ankeny High Tennis Courts	3	1	12
Palisades-Kepler State Park	4	1	30
Central Lee FFA	20	1	18
West Capitol Terrace - DSM	75	6	300
Earling Schools	5	1	90
Cherokee Middle School	5	1	70
3 Mile Recreation Area	7	1	8
Pocahontas Elementary Sch	1	1	30
Coralville Central Elementary	3	1	30
Stephens St Forest Campground	7	1	35
Pisgah Community Center	3	1	20
McCombs Middle - Des Moines	17	3	335
Lakewood Elementary - Norwalk	17	7	300
Brubaker School - Des Moines	1	1	60
Schuetzen Park - Davenport	3	1	45
Spencer Middle School	14	1	65
Lewis Central - Council Bluffs	5	1	30
Moulton Elementary-Des Moines	2	3	15
Crocker Elementary - Ankeny	2	2	100
Bondurant-Farrar Schools	2	1	45
Anthon-Oto School Outdoor Class	6	2	80
Atlantic Middle School	5	2	100
Colfax-Mingo High School	2	1	35
Pleasant Hill Copper Creek PK	2	1	18
Wallace Elementary - Johnston	2	1	35
Lovejoy Elementary - DSM	2	1	48
Guthrie Center Schools	5	1	30
Crestview School - Clive	5	1	30
Capitol East Elementary - DSM	1	1	30
Blakesburg Elementary	6	1	30
Monroe Co Fairgrounds	6	1	20
Lucas County Fairgrounds	6	1	22
Moravia Elementary	6	1	23
Lovilla Youth Ball Field group	6	1	12
Bloomfield Home Schoolers	20	1	25
Ottumwa Home Schoolers	20	1	5
Pomeroy-Palmer Comm School	20	1	65
Great Western Trail - Polk Co.	500	2	75
Coralville City Parks	200	1	50
Cedar Falls City Parks	200	1	25
Iowa City City Parks	200	1	25
Oxford City Park	5	1	10
Whitewater Canyon - Dubuque Co	1,000	1	35
Totals to date	2,505	73	2,713



DEMONSTRATION PLANTINGS 2007

The DNR foresters, with assistance from the City of Davenport City Arborist, City Parks Directors in Cedar Falls, Coralville and Iowa City and Dubuque and Polk County Conservation Boards coordinated 52 demonstration TFK and TFT plantings to date in MidAmerican Energy, Alliant Energy and Aquila service areas during the spring of 2007. Sites are often chosen at random based upon the interest of holding tree planting events by principals, teachers, students and even custodial staff. Local foresters make the arrangements for the day of the planting and presentations. The foresters also make the arrangements for the trees often at discounted prices from local INLA nurseries. INLA nurseries work to deliver the trees in advance and local teachers make sure that underground utilities are located for safety considerations.

At each planting, foresters presented students and adults alike with a hands-on chance to learn about planting and the value of trees, including clean air and energy conservation. The size of the audience at each demonstration varied. Some schools chose to break the plantings into separate classes of 15 to 30 students while others chose to create an assembly for all classes (200-400 students) to participate at once. **A total of 73 presentations to 2,713 students and volunteers** as well as a large number of teachers and other adults about proper planting, care and responsibilities. **Students and volunteer-shelped plant 2,505 trees** at the demonstration sites between March 26th and June 30th.

“Dear DNR Forester,

“It was kind of fund watching my students plant trees, some had never even handled a shovel before, but they all listened to instructions and got the job done. Thanks for helping us get this project of the ground!

Thank you!”

*-Pat Rauch, Ankeny High School
Tennis Coach.*



Above: Ankeny Tennis Team getting the job done by planting 3 large Black Hills spruce trees



OVERALL RESULTS

The TFK and TFT campaigns continued to grow in 2006.

A total of **17,248** packets were distributed (8,714 TFK and 8,534 TFT).

This is an increase of 2,728 packets as compared to the year 2006 and an increase of 15,848 packets from the first year of the program in 1990 when only 1,400 teachers and youth leaders received materials from TFK.

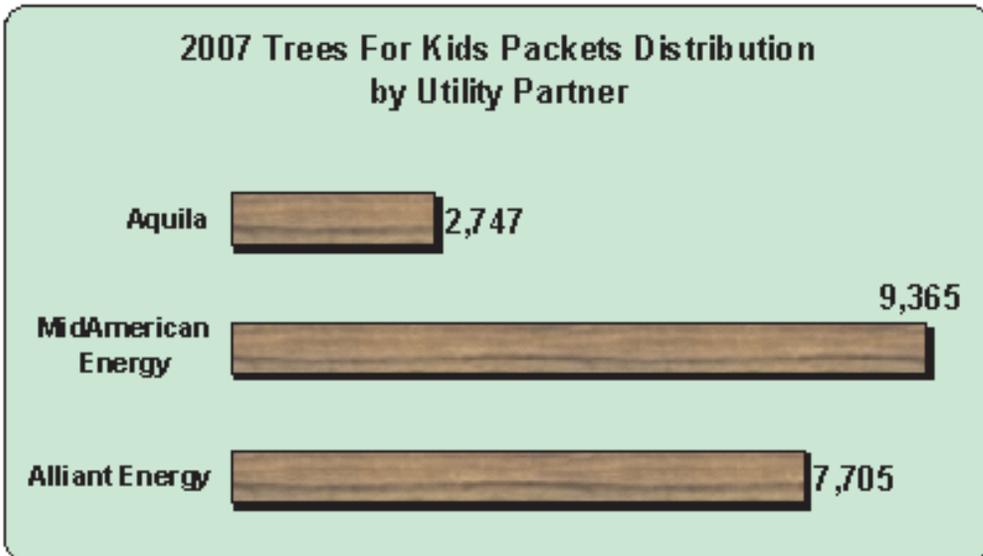


A total of **115,907** trees were planted during the Spring of 2007 on public areas as a result of Trees For Kids.

- **MidAmerican Energy**
A total of **9,365** teachers received TFK materials and planted **62,933** new trees with their classes.

- **Alliant Energy**
A total of **7,705** teachers received TFK materials and planted **51,778** new trees with their classes.

- **Aquila**
A total of **2,747** teachers received TFK materials and planted **18,460** new



The number of TFK packets distributed decreased from the 2006 mark of 10,560 to 8,714 in 2007. But the number of TFT packets distributed increased from 3,960 packets in 2006 to 8,534 in 2007 as more promotional efforts targeted at Middle School and High School Science and Social Studies teachers were implemented.

A random, SurveyMonkey online survey of 307 of the participating teachers revealed a positive attitude towards the TFK program. On a scale of 1-5 with 5 being the highest, 95% of the participants gave a rating of 4-5 for the overall educational value of the teachers packets. Eighty-nine percent of the participants rated the poster 4-5.



OVERALL RESULTS CONTINUED

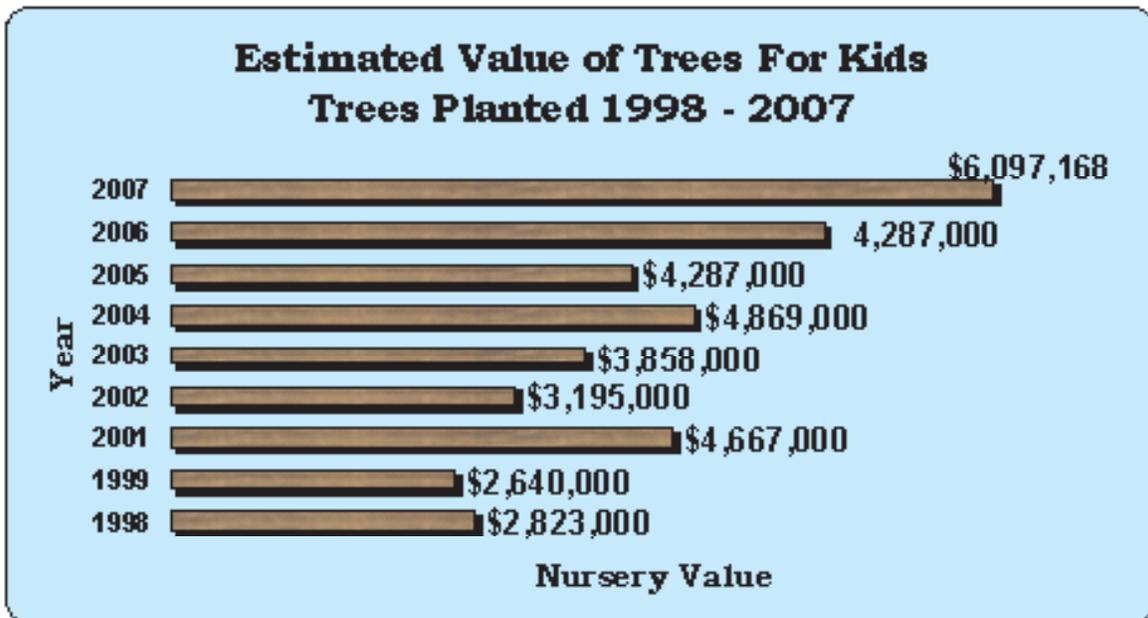
Of the teachers who responded to the survey, approximately 28% planted trees, with an average of 24 trees per classroom/youth group. Most of the individuals who did not plant trees cited lack of time while others will do their tree plantings in the fall.

In addition, many of the elementary school classes participated in the Reading Rangers program in which the DNR planted trees in their honor at Loess Hills State Forest near Pisgah, Iowa.

Approximately 39,408 seedlings (trees 12 to 24 inches tall) were planted. With the estimated value of seedlings planted at roughly 50 cents per tree, these trees were worth **\$19,704**.

In addition, a total of **76,499** landscape sized trees (min. 6 to 8 feet tall) were planted. At an estimated value of \$100 per tree, these trees were worth **\$7,649,900**.

Bringing the total value of trees planted to **\$7,669,604**.





TEACHERS

Surveys revealed that the TFK program was used by many different kinds of teachers. The surveys showed that grades 3-6 were the most active in the program. Fifth grade was the most active overall, with 29% of the respondents being fifth grade teachers. Of the responding teachers, 47% taught grades 3-5.

“Thank you for helping us plant trees, we really appreciate what you’ve done, you helped our school, community and environment. With your help we made our school look cool.”

Nickolas Talton

“Thank you for helping us plant. I can’t wait to see what it will look like in 10-15 years! I want to go back outside and plant more!”

Alex Ceron

*- both of McCombs Middle School
Des Moines, IA*



READING RANGERS

The popular activity known as Reading Rangers was included in the packet again this year. Reading Rangers is an activity designed for students in classes who, for one of many reasons, cannot plant a tree on their school grounds. It gives the students a sense of accomplishment for having been involved in the planting of a tree. In this program, the DNR plants a tree in a state forest for every 20 pages of publications relating to nature that the students read during Earth Week. After submitting each class’ total amount of pages read, they each are awarded a certificate signed by the DNR Bureau Chief of Forestry. The certificate tells them how many pages they read and how many trees were planted on their behalf due to their reading efforts.

“This is a great way to encourage the students to read books - they are amazed that they can help plant trees by reading books.”

*-Mrs. Denise Erdmann
South O’Brien Community Schools
Talented and Gifted Program*



Above: East Union 4th graders are planting a tree at Three Mile Lake near Afton.

In the spring of 2007, the Reading Rangers program had 30 classrooms from around the state submit entries. These classes ranged from Kindergarten to 8th grade. A grand total of 54,240 pages of environmental books were read by Iowa’s Reading Rangers this spring, resulting in 2,717 new seedlings being planted at Loess Hills State Forest near Pisgah, Iowa.

Champion Reading Rangers schools: 1st Place: Stewart Elementary in Washington; 2nd place (tie) Seymour Community School and Sageville School in Dubuque and 3rd Place Holy Trinity School in Des Moines.



TREE PLANTING BENEFITS

Efforts in planting trees has a positive effect on our environment, in terms of energy savings, air and water quality improvement and increased wildlife habitat.

Though research on the exact values and amounts of energy savings are still in preliminary stages, we estimate that the 115,907 new trees from the Trees For Kids effort that have been planted to date will provide 13,563,233 kWh in cooling and 581,665 Mbtu in heating savings over the next 30 years.

In addition, the 115,907 new trees will absorb known air pollutants such as Ozone (92,428 lbs.), PM10 (256,238 lbs.), Nitrogen dioxide (64,469 lbs), Sulfur dioxide (77,463 lbs.), Carbon monoxide (4,683 lbs.) and Carbon dioxide (13,105 lbs.). These new trees will sequester 77.03 tons of carbon.

Finally, through leaf canopy interception and soil absorption, 12,168,452 gal. of stormwater runoff will be avoided over the next 30 years.

“The trees are good for the school’s environment and they are good for the wildlife animals.”

-Mrs. Heglands Class, Lakewood Elementary, Norwalk, IA

“Thank you for helping us plant trees, it will really help our community and pollution too. Plus the school looks much, much better now - I want you to come back again and help us plant more.”

-Brittany Kish, McCombs Middle School, Des Moines, IA

“Thanks for teaching us how to plant trees, now I’m going to plant a tree at my house”

-Billy Bacus, McCombs Middle School, Des Moines, IA

“Thank you soo much for coming to our school to help us help the environment. I got to help put the stake in the ground, spread the mulch and dig the hole”

-Katlyn Schochenmaier, Lakewood Elementary,



Left: Schuetzen Park in Davenport were Elementary students help plant a tree in the Spring of 2007 for TFK.



Right: Stratford fourth through sixth grade surrounds the tree they planted for Arbor Day.



BUDGET 2007

Expenditures

Amount

Printing:

TFK Teacher Packets (9,240)	\$4,427.60
TFT Teacher Packets (9,570)	\$4,785.30
Invasive Species Poster Printing (18,000)	\$3,470.00
Native Trees to Plant Booklet Printing (20,000)	\$4,800.00
TFK Partner Newsletter Printing (2,000)	\$ 165.00
Garlic Mustard Awareness Brochure (18,000)	\$1,460.00
Artwork for Poster	\$ 950.00
Subtotal	\$20,057.90

Postage and Mailings:

Mail Services Fees	\$6,569.00
TFK Partner Packet Mailing	\$180.00
TFK Teachers Packet Mailing	\$4,037.50
TFT Teachers Packet Mailing	\$2,798.60
Subtotal	\$13,585.10

Marketing and Promotion:

TFK Aquial Pencils(18,000)	\$1,620.00
TFK Alliant Energy Pencils (18,000)	\$1,620.00
TFK Stic Pencils- MidAmerican Energy (18,000)	\$1,620.00
TFK Wooden Rulers-MidAmerican (18,000)	\$1,288.00
Subtotal	\$6,148.00

Supplies:

Envelopes, Mailing Sealers and Office Supplies	\$1,903.00
Trees for Demonstration Projects	\$14,874.97

Total

\$56,568.97



Left: Boys and Girls Club of Des Moines-planting a tree



Right: Autumn Blaze Maple is being planted by East Union 4th graders



BUDGET CONTINUED.....

Receipts	Amount
MidAmerican Energy	\$30,000.00
Aquila	\$15,000.00
Alliant Energy	\$12,000.00
Quad City Bank and Trust	\$ 1,000.00
Iowa Woodland Owners Association	\$ 250.00
Iowa Tree Farm Committee	\$ 250.00
Trees Forever	\$ 500.00
Modern Woodmen of America	\$ 3,250.00
Miscellaneous Donations	\$ 55.00
Carryover From 2006	\$ 500.00
TOTAL INCOME:	\$62,805.00
TOTAL EXPENSES:	
APPROXIMATE BALANCE TO DATE:	\$6,236.03

Note: Labor is not reported above-is provided through a grant from the USDA Forest Urban Forestry Program- NA State and Private Forestry



Left & Right:
East Union 4th graders at 3 Mile Lake participating in the Trees for Kids program.





1.) Complete Fall 2007 Trees For Kid demonstration plantings

Remaining 2007 Trees For Kids funding will be made available to Iowa DNR Forestry Bureau to establish additional trees at elementary, secondary and public park sites during the Fall of 2007. Efforts will include actual demonstration projects involving DNR Foresters and also matching grants to local community/school efforts.

2.) Evaluation of Trees For Kids and its future

Recent leadership changes within the DNR Forestry Bureau will require an evaluation of the continuation of the Trees For Kids program. As of April 9, 2007, I was replaced as DNR Forestry Bureau Chief and assigned new duties - a new Forestry Bureau Chief will be named shortly.

New leadership will need to determine if the Trees For Kids program will remain within the Forestry Bureau and be assigned to new staff, or should Trees For Kids be housed within a different section of the DNR.

Trees For Kids began in 1990 as a way to celebrate Earth Day 20 and evolved into an annual tree education and planting program that was self-funded through contributions and donations. Teacher and youth leader involvement has steadily grown from 1,400 in 1990 to 17,248 in 2007, with students and teachers planting 1,273,212 new trees on public areas in the past 17-18 years.

It is my hope as the “heart and soul” of Trees For Kids since the beginning that the DNR continue its efforts in youth education and tree planting - we have reached so many kids and teachers with this program - it deserves continuation.

In the words of Brandi Karns of McCombs Middle School in Des Moines

“THANK YOU SO MUCH FOR MAKING THE SCHOOL MORE BEAUTIFUL. IF WE DIDN'T HAVE THE TREES, THE WHOLE SCHOOL WOULD BE BARE.”

THANK YOU TREES FOR KIDS PARTNERS

JOHN WALKOWIAK, FORESTER AND LAND PROTECTION LEADER
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