TECHNICAL NOTES

U S Department of Agriculture | Natural Resources Conservation Service

TN - PLANT MATERIALS - 47 | June 1997

TREE PLANTING CONSERVATION EDUCATION PROJECTS

I. TREE PLANTING PROJECT

A. Objectives

1) Get students and their teachers involved in learning about trees in an educational setting. Students will learn how to plant and care for trees. They may also learn how to propagate seedlings from seeds. They may learn about nurseries and greenhouses.

2) Teach students soil characteristics that affect tree growth by using the demonstration project as an outdoor classroom. Other topics dealing with soil, water, air, plants and animals may be discussed. The project can be used by science classes to evaluate and monitor tree growth. Students can submit class reports on subjects such as forestry, horticulture, agroforestry and rain forests.

3) Teach students the many benefits attributed to trees such as providing shade, reducing energy costs, aesthetics, wildlife habitat enhancement, oxygen production and how trees serve as windbreaks and buffer zones for dust and traffic noise.

4) Teach teamwork through tree planting. Students will learn to take pride in the contributions they have made to the school and their community through this project.

B. Activities

1) Planting ceremonies can be targeted to commemorate a graduating class, Arbor Day (March 7-14 in CA. & last Friday in April, Nationally), Agriculture Week, Soil Stewardship Week or other special school events.

2) Community organizations such as the Chamber of Commerce, the Parents Teachers Association and the local Resource Conservation District will be encouraged to participate and will be kept informed of project activities.

Prepared by Raul G. Ramirez, Soil Conservationist, Natural Resources Conservation Service, Bakersfield, CA and reviewed by David A. Dyer, Manager, Lockeford Plant Materials Center, Natural Resources Conservation Service , Lockeford, Calif.

B. Activities (Continued)

3) Articles describing the tree study will be written for the school paper, year book, newsletter and the local paper. Photos and slides of the project activities will be taken for school publications and other displays.

4) Develop a reference section on trees in the school library and encourage students to use it.

II. TREE PLANTING PLAN

A. A planting plan and design should be prepared. Local irrigation, or nursery companies will sometimes volunteer assistance and provide an irrigation system design, or donate materials for the school tree planting project.

B. The plan and design should describe:

1) Number of trees to planted by species.

2) The location where new trees will be planted on the school grounds.

3) Size of cuttings, seedlings or trees to be planted, (1 to 5 gal. or length of cuttings).

4) Location of existing and proposed irrigation system(s) components such as water source, pipelines, bubblers and/or emitters per tree and flow rate (GPH or GPM).

5) Include windbreak specifications, which may be obtained from the Natural Resources Conservation Service (NRCS) Field Office Technical Guide.

6) Include a copy of the soil descriptions. This information may be obtained from the local NRCS Field Office.

7) Optional: Plan or design may also show location and describe varieties of existing trees on the school grounds. Check with the University of California Cooperative Extension (UCCE), County Home and Farm Advisor or the local nursery for tree identification assistance.

III. INFORMATION, GRANT and FUND SOURCES

1) The National Arbor Day Foundation
   100 Arbor Ave.
   Nebraska City, Nebraska 68410
   Ph. (402) 474-5655

2) National Tree Trust
   1120 G. St. NW, Suite 770
   Washington, DC 20005
   Ph. (202) 628-8733

3) California Department of Forestry and Fire Protection
   P.O. Box 944246
   SBA Tree Planting Program
   Ph. (916) 957-4805

4) The Nature Conservancy
   International Headquarters
   1815 North Lynn St.
   Arlington, Virginia 22209
   Ph. (703) 841-4860

5) California Releaf
   3001 Redhill Ave.
   Building 4, Suite 224
   Costa Mesa, CA. 92626
   Ph. (714) 557-2575

IV. ESTABLISHMENT CHRONOLOGY

1) Optional: Test soil for toxic levels of boron, salinity (EC) and sodium (SAR). Soil samples can be tested at a local lab for a nominal fee.

2) Schedule projected planting date; March, April and May are best months for planting. Poplar cuttings may have to be cut and planted in early February before trees begin to bud.

3) Stake or mark ground where holes will be dug for trees.

4) Prepare tree planting site by clearing ground cover and digging holes. When digging, watch for buried utility service lines or wire cables. Remember "Safety First"! This is the heavier phase of the work and can sometimes be done mechanically to save time and labor.

5) Organize planting crew; (student/teacher teams, parents and or volunteers).

6) Put fertilizer tablets and put tree in hole and cover with soil. Put hose in hole and water to settle soil, build basin around tree base and water thoroughly. Do not tamp with shovel handle or foot. Don't amend soil unless it is very high in clay content or very sandy.

V. MAINTENANCE

1) Maintain adequate water in root zone for optimum growth. A water schedule should be available to determine when to irrigate and how much water to apply during the year. Soil moisture should be monitored periodically.

2) Fertilize when needed at the appropriate rates. Obtain recommended fertilizer types and rates from the County Home and Farm Advisor or the local nursery.

3) Apply additional water if needed to leach harmful salt levels from tree root zone.

4) Keep tree base weed free. Be careful not to injure bark with weed eater or herbicide.

5) When using pesticides including herbicides, it is best to apply when school is out of session for a least a couple of days. It is unsafe to spray on windy days. Obtain type and rates from the County Home and Farm Advisor or the local nursery. Read and follow container label instructions and warnings.

6) Prune tree as needed. Use County Home and Farm Advisor's tree maintenance guide or other horticulture materials. Call the local utility company to prune trees that may be located under power lines servicing your school.

7) Seedlings and small trees may need to be staked to protect them from strong winds and to provide for upright growth. Maintain trees staked for as short time as needed, taking care that bracing wires do not get embedded in the tree bark, causing injury and impeding growth. Stake as infrequently and for as short a duration as possible.

8) Protect trees from vandalism or injury. Tree shelters (wire or cardboard) may be needed to protect trees from rodent damage. Replace damaged trees as soon as possible.