Trees are Terrific... from Acorn to Oak!

2011-12 Texas Arbor Day Poster Contest Activity Guide
Dear Teacher:

You are invited to participate in the 2011-12 Texas Arbor Day Poster Contest, sponsored by Texas Forest Service. This year’s theme, “Trees Are Terrific… from Acorn to Oak!” is designed to increase knowledge about the importance and diversity of the oak tree as well as introduce students to the process of tree identification.

Oaks have offered us shelter, beauty, and resources, as well as serving as a symbol of strength throughout the history of the United States. Through basic classification skills students will recognize unique characteristics that separate oaks from other trees.

Using the activities in this guide is encouraged, but not mandatory, in order to participate in the state poster contest. You may adapt, alter, or supplement these activities to meet the needs of your class.

Follow the contest rules as they appear on page 16, making sure that you complete the school winner report form and attach it to the back of your school’s winning poster. The deadline for receiving posters is December 16, 2011!

Poster contest details are also available on our agency website, at http://txforestservice.tamu.edu. For the latest information about the contest, sign up for the agency E-News on our home page under “tools.”

We wish you the best of luck and a happy Arbor Day!

Gretchen Riley
Contest Coordinator

Awards: Contest winners will be recognized at the State Arbor Day ceremony in on April 27, 2012. Other state winner prizes include a $500 savings bond, a year’s family pass to state parks in Texas, and a framed copy of their poster. The student’s teacher will receive a personal i-Pad and $250 towards classroom supplies. The winner’s school will receive $250 towards environmental books or supplies and a tree planted on campus as part of an Arbor Day celebration!
Welcome .......................................................................................................................... 2
Activities Guide Overview ............................................................................................ 4-5

Step 1
Take a closer look at the mighty oak ............................................................................ 6-13
Basic activity .................................................................................................................. 6
Extension activity ......................................................................................................... 14

Step 2
Create a poster ............................................................................................................. 16-18
Instructions and list of state prizes .............................................................................. 16
Poster contest rules ..................................................................................................... 17
School winner report form ............................................................................................ 18
Certificate of participation .......................................................................................... 19
School winner certificate ............................................................................................. 20

Step 3
Celebrate Arbor Day .................................................................................................... 21

Students from Brownsville elementary schools participate in their Arbor Day ceremony, April 23, 2011
Take a Closer Look at the Mighty Oak

Learning Objectives

• Students will recognize the importance and diversity of the oak

• Students will identify characteristics of different species

Basic Activity

• Use a basic tree identification key

Extension Activity

• Make a leaf and fruit collection

Visit http://TexasTreeID.tamu.edu — a great site for learning more about trees!

Discover the richness of tree species in Texas by using the online species “key” or learn how to identify trees and how they grow. Pages on the site offer tips for making a leaf collection, describe the ecoregions in Texas, and explain which plants are considered invasive pests! Take the online “scavenger hunt” to see how much your students have learned. You can also visit http://www.arborday.org/trees/what_Tree/ for another online tree ID site.
Step 2
Create a Poster

Learning Objective

• Students will create a poster that reflects their understanding that oaks have unique characteristics that separate them from other trees.

2010-2011 Texas Arbor Day Poster Contest regional winners

Maya Joseph
Coppell, TX
Trinity-Blacklands

Hannah Oh
Temple, TX
Central Texas

Christine Peavler
Harlingen, TX
West & South Texas

Katherine Simpers
Nacogdoches, TX
East Texas

Step 3
Celebrate Arbor Day

Learning Objective

• Students will plan and participate in an Arbor Day celebration and learn how to correctly choose and plant trees.
Take a Closer Look at the Mighty Oak

Step 1
BASIC ACTIVITY

Classroom Activity:
• Students will learn to use a basic tree key and create a simple key to identify some oak species in their community, or identify their state tree or tree common to their region.

Objectives:
Students will be able to:
• Describe several ways oaks have affected the development of the United States
• Use a simple classification key
• Identify characteristics unique to oaks that separate them from other trees
• Research oaks (or common tree genus) found in their community and create a simple key that uses characteristics of two or three different species to distinguish one from another

Time Recommended:
• One 60 minute class period

Materials Needed:
• Copy of handouts on page 12 & 13 (one per student)
• Pencil and paper
• Tree field guides/books or Internet access
• A list of oak species common to your area
• Leaf samples from as many different kinds of trees as possible – include conifers and broadleaves (for broadleaf samples, bring in a twig with several leaves attached)
• Acorn sample (if available)

National Science Standard Correlation:
Students will develop an understanding of:
• Structure and function in living systems
• Populations and ecosystems
• Diversity and adaptations of organisms

National History Standard Correlation:
Students will:
• Develop an understanding of national symbols through which American values and principles are expressed
• Engage in historical analysis and interpretation

Instructional Sequence
Anticipatory Set
Ask students to name some symbols of our nation. Record responses on the board without comment. Fill in the list of remaining symbols on the board as you tell the class that the United States has a national flag, a national bird - the bald eagle, a national anthem - the “Star Spangled Banner,” a national motto - “In God We Trust,” a national flower - the rose, and even a national march - “Stars and Stripes Forever.”

Tell students that other nations have similar symbols that reflect their history and culture but, in addition, many countries also have a national tree. Examples include:
• Canada - maple
• India - Banyan
• Denmark - beech
• Lebanon - cedar
• Finland - birch
• Honduras - Ceiba (kapok tree)

Trees are also depicted on a number of flags and coats of arms. Ask students why they think a country would have a national tree. (Answers may include important food or timber products the tree provides to the nation, beauty, shelter, shade, etc.) Comment that while every state in the United States has a state tree, America has never had a national tree.

Previously all United States symbols had been selected by politicians, but in 2001, for the first time, the American public had the opportunity to vote for a national symbol – a national tree. The voting process, hosted by The National Arbor Day Foundation, made it possible for Americans of all walks of life to help select the tree they felt best reflected our country to serve as this important national symbol. Not only adults, but schoolchildren across the country had their first opportunity to vote for something of national significance.

Hundreds of thousands of people participated in the vote. On April 27, Arbor Day 2001, votes were tallied and the oak was announced as the people’s choice for America’s National Tree.

2002 National Poster Contest Winner, Allison Sauds, joins dignitaries in planting an oak tree at the United States Capital. The oak was selected as people’s choice for America’s National Tree.
officials, special dignitaries, and the 2001 Arbor Day National Poster Contest winner planted a young oak tree on the United States Capitol grounds.

Explain that the United States has a wealth of tree species, more than twice as many as in all of Europe. America has the largest, the oldest, and perhaps the most beautiful trees in the world. *Ask students why, out of all these trees, the oak might have won ... what would people have considered important in selecting a tree that represents the spirit of America, and of its people?* (Allow discussion for several minutes.)

Draw a tree trunk on the board and write the word OAK in it. Using comments from students, guide discussion to create a visual “map” to illustrate possible considerations why the oak might have been selected as the national tree (see Illustration 1). (If time allows, do Enrichment Activity on page 8). If not already mentioned, offer as possibilities that perhaps people wanted to select a tree that:

**Grows in many places across the country**
- About 60 different oak species grow in the United States. Oaks are the most widespread broadleaf trees in our country.

**Has multiple uses**
- Oaks have strong wood, with a beautiful grain, that is prized for furniture and flooring.
- Oak is valued in shipbuilding and for railroad crossties, which was important in the development of our nation.
- White oak was prized for barrels because it holds liquids better than almost any other kind of wood.
- Oaks contain tannin, a chemical used by Native Americans and early settlers to pound into animal skins to make them soft and long lasting.
- The bark of some oaks has been used in medicine, for dyes, and even for cork.
- Acorns are one of the most important food sources for wildlife.

**Has good physical features or characteristics**
- Oaks are hardy and can live up to 300 years or more.
- Oaks generally have a spreading shape which provides lots of shade.
- Oaks are sturdy.
- Oaks often grow tall (some red oaks grow to well over 100 feet).
- Oaks are attractive trees, some red oaks change color in the fall.

**Has played an important role in the history of the United States**
- Oaks are the trees most commonly found in legends.
  - One tribe of Native Americans believed a white oak was the ancestral guide for when to plant corn.
  - Abraham Lincoln found his way across a river near Homer, Illinois, using the Salt River Ford Oak as a marker.
  - Jeremiah Wadsworth saved the Connecticut Charter by hiding it in the hollow of an old oak tree. The tree later became known as the Charter Oak.
  - Andrew Jackson took shelter under Louisiana’s Sunnybrook Oaks on his way to the Battle of New Orleans.
  - The Republican Party was founded under the Republican Party Oaks in Michigan.
  - “Old Ironsides,” the ship USS Constitution, earned its nickname from the strength of its live oak hull, famous for easily repelling British cannonballs.
Help students understand that, no matter why people voted for oak as the national tree, oaks are an important part of our nation’s heritage. They are also damage-resistant, hardy trees that have merited admiration and respect for the shelter and many vital products their wood has long provided Americans.

Ask students how many of them can recognize an oak? Can they describe how it is different from other kinds of trees? Tell students they are going to have a chance to identify several different kinds of trees and learn a little bit more about oaks in detail. (Note - If students are to be graded on the activity, put the performance assessment criteria (page 11) on the board.

Key Concept: Explain that despite their great variety, oaks share several distinctive characteristics that separate them from other tree species.

- Oaks produce acorns and grow from acorns.
- Most oaks can live for centuries.

Many oak species also share a common shape, being rounded with a broadly spreading crown. Some oaks hold onto their dead leaves through the winter and shed

Latin is the language of taxonomy, and each species is referred to by a single Latin name. Using a common language that is understood by scientists all over the world, no matter what their native language, helps provide distinct identification for plants that have many common names. The Latin name consists of two words (occasionally three.) The first word is the name of the genus (a group of closely related species) and the second word is usually descriptive and designates the particular kind or species of plant or animal. For example: *Quercus rubra* is the Latin name for Northern Red Oak… *Quercus* is the genus name and *rubra* is the species name.

The Activity - Use a basic tree key and create a simple key to identify some oak species in your community. (If oaks are not available, students can learn to use a basic tree key and create a simple key to identify their state tree or a tree common to their region.)

Preparation: Start the activity by introducing students to some of the necessary concepts they must have for tree identification. Have several examples of conifers on hand, some with scale-like leaves and some with needle-like leaves. If possible, have actual examples of broadleaf trees, one that shows an opposite attachment to the twig, one that shows an alternate attachment to the twig, one that shows a compound leaf and one that shows a simple leaf. When actual samples are not available, draw examples on the board or overhead. (See illustrations on page 8 and 9.)

Basic information - Explain that there is a scientific process scientists use to classify plants and animals. This process is called TAXONOMY.

Taxonomy provides an organized system for grouping things based on certain “like” characteristics. When scientists classify trees, they start by dividing trees into two main groups-conifers and broadleaves.

1. CONIFERS – Conifers are cone-bearing trees and most are evergreen. Conifers have needle-like or scale-like leaves.

A. Conifers with needle-like leaves – Tell students to closely examine a conifer sample with needle-like leaves. Have them look to see if each needle attaches individually to the twig or if the needles are attached to the twig in bundles of needles grouped together. This is one clue they may need to look for when identifying a mystery tree.

B. Conifers with scale-like leaves – Have students look closely at a sample of a conifer that has scale-like leaves. Point out how the tiny, scale-like leaves overlap each other. Explain to students that some of these conifers may have cones that look more like small berries.

Make sure students can distinguish between conifers with needle-like and scale-like leaves before proceeding to a discussion of broadleaf trees.
2. BROADLEAF TREES – Broadleaf trees have thin, flat leaves that are usually shed annually (deciduous). Broadleaf trees bear a variety of fruit and flowers.

Carefully explain to students that where the leaf stalk attaches to the twig there is usually a BUD. That bud is next year’s leaf, already on the tree. The leaf will fall off, but the bud will remain on the twig through the winter, opening into a new leaf the following spring. Point out that if a bud is not exposed or visible, look for a swelling at the base of the leaf stalk to determine attachment. Tell students that the bud (or swelling) is an important clue…it tells them THE LEAF STARTS HERE! In the classification process of broadleaf trees, scientists look at two important clues to further separate these trees into groupings.

A. Simple leaves OR Compound leaves – One important reason to look for the bud is to determine if the tree has simple leaves or compound leaves. Draw sample pictures on the board to illustrate what students should look for. Explain that they should find the bud or swelling and then look at the leaf stalk (petiole). If there is just one blade on the leaf stalk, it is a SIMPLE LEAF. If there are many blades on the leaf stalk, it is a COMPOUND LEAF. Tell students that the multiple blades of the compound leaf are called LEAFLETS.

Also important for students to know is that the leaflets of the compound leaves are attached to the leaf stalk (not the twig) in several ways. When leaflets are attached across from each other on the leaf stalk in a pattern that resembles a feather, that leaf is referred to as a PINNATELY COMPOUND LEAF. If the leaf stalk comes up and branches out again giving the appearance of a number of feathers attached to the leaf stalk, that leaf is referred to as a BIPINNATELY compound leaf.

or TWICE COMPOUND LEAF. If the leaflets are arranged on the leaf stalk in a pattern that looks like the fingers on the palm of a hand, that leaf is referred to as a PALMATELY COMPOUND LEAF.

B. Opposite Arrangement OR Alternate Arrangement
Another important reason for students to look for the bud or swelling where the leaf stalk attaches to the twig is that it will also help them determine the ARRANGEMENT of the leaves on the twig. When two or three leaves are arranged directly across from each other on the twig it is called an OPPOSITE ARRANGEMENT. When leaves stagger up the twig and are not located directly across from each other on the twig it is called an ALTERNATE ARRANGEMENT. It is very important to stress to students that opposite and alternate arrangement refers to the way the leaves are arranged on the twig, not the way the leaflets are arranged on the leaf stalk.

Encourage students to closely examine the leaf attachment. Sometimes many buds will be clustered close together near the end of the twig giving the impression of being opposite (often common with oaks). But if students look down a little further on the twig, they will see that these buds or leaves actually have an alternate arrangement.

Even when leaves have fallen from the tree, the buds, as well as the branching pattern, still remain to provide the clue to arrangement.

Mention that many other factors are important in tree identification. Other things scientists look at are:

- **Leaf characteristics** – like leaf margin (the edge of the leaf) which can be lobed, toothed or entire (smooth). Also look at leaf shape, size and color.

- **Bark** - Tree bark can be smooth, rough, or scaly. Each tree species has a characteristic way of expanding or breaking its bark forming patterns by which many
In some areas, depending on the time of year, only conifers may be available for classification. Have students use the classification key to discover what kinds of trees they are likely to be. Students work in pairs and record their results. Determine if any oaks are growing near your school. If so, let students closely examine them. If the oak has not leafed out, look for dead leaves under the tree and remnants of acorns. Some oaks in warmer parts of the United States are evergreen (they keep their leaves through the winter) and some oaks hang onto their dead leaves into the next spring making them easier to identify year round.

Explain that they are going to take a closer look at the oak. Return to the classroom and hand out copies of the Student Worksheet (page 13). Review the General Characteristics of Oaks section together. Then take a look at the sub-groupings of red oak and white oak. Use the information provided on the handout to fill in the first two sections on the worksheet. Write the list of oaks common to your area on the board. Allow students to work together to research characteristics that would help classify these oak species and enter those in the bottom section of the worksheet. Students now have a working key they can use to identify some of the oaks in their community.

(If there are no oaks in your community, have students look at the model on the worksheet and work together as a class to create a key for trees common to your area.)

Trees can be identified.

- **Seeds/fruits** – Most trees grow from seeds. A mature plant produces seed that is the genetic material for new plants of that same kind to grow. Some trees have seeds, seed pods, or fruits which aid in tree identification (oaks have their characteristic acorns).

- **Tree shape** – ie. spreading, columnar, triangular

- **Buds and twigs** – Buds can be large and fat, like the magnolia; long, sharp and slender, like the beech; button-shaped, like the dogwood; or tiny, like the hawthorn. All offer clues that help identify a tree.

Once you have reviewed the basic information with your students and they understand the terms they will need to know to answer the classification questions, it is time to begin the activity.

Give each student a copy of the Basic Tree Identification Key (page 12). Take students outside to observe some of the characteristics previously discussed by examining trees on the school grounds or in the neighborhood. This will help them sharpen their observation skills. Practice using the key together as a class.

Gather students in front of a tree. Instruct students to look at the descriptions above the two big boxes on the worksheet that say, “BEGIN HERE.” Ask students to look carefully at the tree and determine which of the two descriptions best describes the tree. (If it is a conifer, students will work with the clues in the left text box. If it is a broadleaf tree, students will work with clues in the right box.)

Explain that in each step, as they move from the top of the box down, they will need to choose between two clues that give tree characteristics. They need to pick the box with the clue that best describes their mystery tree then go from that box to the next set of clues until they come to the last box that gives them an idea of what kind of tree they are examining.

NOTE: The Basic Tree Identification Key will only get students to certain groupings of trees with similar characteristics. After some practice, students may wish to go online at www.arborday.org/treeid and use the more detailed What Tree Is That? tree key to identify their mystery tree down to a genus or species.
### Assessment:

The ability of a student to key out actual tree groups and create a key for several species within a genus serves as authentic assessment.

**Performance evaluation.** Student should be able to:

- identify the seed that is unique to oaks and draw an accurate example of that seed 0-2 points
- use the Basic Tree Identification Key to correctly classify several unknown trees 0-2 points
- accurately describe two ways the Oak was used in the building/settling of our nation 0-2 points
- accurately complete the worksheet and classify at least two oak species (or trees common to your area) 0-4 points

### Resources

- Antunez de Mayolo, Kay - *Investigating the Oak Community*, California Oak Foundation
- Davis, Brian - *The Gardener’s Illustrated Encyclopedia of Trees and Shrubs*, Rodale Press, Emmaus, PA
- Duncan, Wilber and Marion - *Trees of Southeast United States*, University of Georgia Press
- Johnson, Hugh - *Encyclopedia of Trees*, Gallery Books
- **Nature Study Guild** - *Master Tree Finder*, Pacific Coast Tree Finder
- Desert Tree Finder
- Winter Tree Finder
- Rocky Mountain Tree Finder

Write:  Nature Study Guild, Box 972, Berkerley, CA, 94701

Petrides, George - *A Field Guide to Trees and Shrubs*, Houghton Mifflen Company

- Rabinette, Gary D. - *Trees of the South*, Van Nostrand Reinhold Company
- Symonds, George W., *The Tree Identification Book*, Quill

**Websites**

- [www.plants.usda.gov/](http://www.plants.usda.gov/)
- [www.horticopia.com](http://www.horticopia.com)
- [www.arborday.org/oak](http://www.arborday.org/oak)

**Texas Forest Service • 11**
Look carefully at the tree you wish to identify. Every part of the tree – the tree shape, the bark, the buds, the fruit/seeds, and the leaves - all will provide clues to help you identify the mystery tree. This simple Tree Key will give you an idea of what kind of tree it might be. Closely examine the tree, then read the first two choices. Which best describes the mystery tree?

My tree has needle- or scale-like leaves:

- Leaves are **needle- or feather-like**
  - Needles clustered in **bundles** of 2-5, evergreen
    - **These are** pines
  - Needles attached **singly**
    - **These are** Rocky Mountain Douglas-fir, or **baldcypress**

My tree has broad, flat leaves:

- Leaves are **compound**
  - Leaves attached **oppositely** on the twig
    - Palmately arranged
      - **These are** buckeye or horse-chestnut
    - Pinnately arranged
      - **These are** ash or boxelder
  - Leaves attached **alternately** on the twig
    - **These are** honeylocust, mimosa, walnut, pecan, hickory, mesquite, goldenraintree, to name a few

- Leaves are **simple**
  - Leaves attached **oppositely** on the twig
    - **These are** oak, elm, ginkgo, beech, cottonwood, magnolia, mulberry, sycamore, hackberry, or sweetgum to name a few

Go to [http://texastreeid.tamu.edu](http://texastreeid.tamu.edu) for a more complete, online identification key.
The Oak - General Characteristics

Oaks are broadleaf trees that bear seeds called acorns. They have simple leaves, arranged alternately. They are often separated into two main groups - red oaks & white oaks. (The Latin scientific genus name for oak is Quercus).

The White Oak Group - Characteristics

- The bark is generally light gray or brown.
- Acorns mature during one year.
- Acorn cups contain no hair inside.
- Leaves are lobed or serrated (saw-toothed) without bristles.
- Acorns are sweeter, with less tannin than the red oaks.
- The white oak produces the most valuable oak lumber because the cells contain bubble-like structures called tyloses that make the heavy wood leak proof. Used for furniture and barrels.

Species include: (deciduous) white oak, post oak, bur oak, swamp white oak, chinkapin oak, overcup oak, chestnut oak, Gambel oak, English oak, blue oak, Oregon white oak; (evergreen) Arizona white oak, live oak, to name just a few.

The Red Oak Group - Characteristics

- The bark is often dark gray, brown or black.
- Acorn cups take almost two years to mature.
- Acorn cups contain fine, silky hairs inside.
- Leaf lobes are usually pointed and bristle-tipped; some are unlobed with the leaf ending in a bristle and a few are oval with smooth edges.
- Acorns are more bitter, with more tannin, than white oaks.
- The wood is not watertight, but is used for lumber, flooring, railroad ties and furniture.
- The name "red oak" probably refers to the red fall coloration some red oaks display in some years.

Species include: (deciduous) Northern red oak, black oak, Shumard oak, blackjack oak, pin oak, scarlet oak, Southern red oak, shingle oak, water oak, willow oak, bear oak; (evergreen) interior live oak, to name just a few.

Student Worksheet

DIRECTIONS: Now that you know how to use a tree identification key, expand the key to identify oak species in your area. This key starts with broadleaf trees that have simple leaves with an alternate arrangement which includes oaks, elms, poplar, beech, etc. Use reference books or the Internet along with this worksheet to get the information you need to create your own tree key to identify oaks in your community. Fill in the blanks where indicated. (If you do not have oaks in your area, research some of the nation's most common oaks to fill in this worksheet or, on a new sheet, create a key to help you identify your state tree.)

BEGIN HERE

This key begins with broadleaf trees that have simple leaves and an alternate arrangement.

Fruit/seed is an ___________________. It is an oak.

The inside cup of the acorn is smooth, not hairy. Acorns mature in one year. It is in the ____________________ oak group.

OR

Fruit/seed is NOT an acorn. It could be an elm, ginkgo, poplar, beech, aspen, cottonwood, kukui, redbud, sweetgum, birch, or many other species.

The inside cup of the acorn is slightly hairy. Acorns mature in two years. It is in the ____________________ oak group.

OR

The Red Oak Group - Characteristics

- It is a ____________________ oak.
  (Describe what makes this oak species unique.)

OR

The White Oak Group - Characteristics

- It is a ____________________ oak.
  (Put information about what makes your species of oak unique.)
Leaf and Acorn Collection

Collecting and preserving leaves is a great way to learn tree identification. It is also a method that can be used to document the different varieties of oaks on your school campus. A collection of identified and preserved leaves is called a herbarium. Below are some examples of how to make your own oak leaf and acorn collection.

To make a traditional leaf collection, it is best to collect in late summer or fall. Follow these simple steps:

1. Locate oak trees on your school campus tree trail.

2. Be aware of poison ivy (it causes allergic reactions in some people and should, therefore, be avoided) which may be growing on the ground or may be growing on the tree that you are examining. Sometimes it may even appear to be the leaves on the tree. Familiarize yourself with poison ivy prior to collecting leaves. Remember, leaves of three, let it be.

3. Before collecting leaves, observe the entire tree, including twigs, bark, and acorns.

4. Choose the leaves that best represent the tree. Leaves and acorns may be found on the ground, just be sure from which tree they fell.

5. While collecting leaves, store the selected leaves either between magazine pages, your field guide, or a phone book. Place a number by the leaf and on a separate piece of paper write down the corresponding number and as much information about the tree and location as possible.

6. Preserve the leaves and acorns using the instructions listed in the next column.

To preserve leaves and acorns:

The best way to preserve your leaves is by using a leaf press, either made or purchased. If a leaf press is not available, layer individual leaves between stacks of newspapers or in a phone book. Top with something flat such as a board to help keep the leaves from shifting and then stack books or other heavy objects on top.

Depending on the size of the leaf, it will take about a week for the leaf to dry. The longer the leaf is allowed to dry, the better the final product. Acorns may be displayed as collected. A drop of glue may help hold the cap on the acorn.

Once the leaves are dry they can be preserved and displayed in one of the following ways:

1. Sprayed with a thin coat of clear plastic or acrylic spray and mounted on poster board with corresponding acorns and identification tag.

2. Placed onto biology paper, sealed with clear contact paper, and stored in an album or three ring binder. Be sure to include an identification tag and attach the acorn.

Identification tag should include the common name, scientific name, collection date, GPS or other identifying location, description of the leaf and acorn (what makes it different from others), and name of the collector.

Go to http://texastreeid.tamu.edu for a list of common and scientific names

Corresponding PLT activities #64, #65, #68
Sample Leaf Collection Displays

Poster type display

Album type display

Sample labels for each specimen

Go to http://texastreeid.tamu.edu for a list of common and scientific names
Objective:
Students will create a poster that reflects their understanding that oaks have unique characteristics that separate them from other trees.

Deadline:
Schedule your school contest so that your winning poster can be mailed to the state coordinator by December 16, 2011. Posters must be received by that date to be considered.

Materials and Time needed:
• Paper no smaller than 8.5” x 11” and no larger than 11” x 17”.
• Markers, crayons, colored pencils, watercolor, ink, acrylic and/or tempura paint.
• A minimum of one class period is recommended.

Texas curriculum standards:
Science
(4.3 & 5.3) Scientific investigation and reasoning – the student uses critical thinking and scientific problem-solving to make informed decisions.
(4.10 & 5.10) Organisms and environments – the student knows that organisms undergo similar life processes and have structures that help them survive within their environment.

Art
(4.2 & 5.2) Creative expression/performance – the student expresses ideas through original artworks, using a variety of media with appropriate skill.

Corresponding PLT Activities: #64 and #68

Create a Poster
Ask each student to create a poster that reflects his or her knowledge about oak trees. Encourage students to think about the diversity of oaks throughout the country and the characteristics and uses that makes oaks so unique.

Students should make sure their poster follows contest rules by using the checklist on page 22. You may select the winner or have a judging panel for the classroom and school contest. Judges could include garden club members, nursery professionals, arborists, the city forester, teachers, PTA members or individuals with an interest in trees who are willing to volunteer.

Texas Poster Contest Prizes
Student Prizes
• a $500 savings bond!
• a framed copy of their winning poster!
• year-long Texas state parks pass for the student’s entire family!
• an invitation to the state Arbor Day ceremony on Friday April 27, 2012!

Teacher Prizes
• a personal i-Pad!
• $250 for classroom supplies!

School Prizes
• $250 towards purchase of environmental books or supplies!
• a tree planted on the school campus as part of an Arbor Day celebration!
Poster Contest Rules

Use this checklist to make certain all entries are eligible for judging. Entries not meeting these guidelines will be disqualified.

☐ 1. All posters must be original artwork created by a student in the fourth or fifth grade. Homeschooled students must be learning at the fourth or fifth grade-level for science to participate.

☐ 2. The student’s first and last name must be written or signed in the upper, right-hand corner on the back of the poster.

☐ 3. a) Posters may be done in marker, crayon, watercolor, ink, acrylic, colored pencil, and/or tempura paint.
   b) Collages are not acceptable. **Do not glue anything to your poster!**
   c) Computer or photo-generated art and/or lettering is not acceptable, without the advance permission of the contest coordinator.

☐ 4. Posters must be no smaller than 8½” x 11” and no larger than 11” x 17.”

☐ 5. Posters must be done on paper that will allow for duplication, display and framing. In addition, posters should not be matted, mounted, laminated, framed, or folded.

☐ 6. The poster must be related to the contest theme in some way. The theme, *Trees are Terrific…from Acorn to Oak!* must be on the poster. All words on the poster must be spelled correctly!

☐ 7. Mail or deliver your school-winning poster by December 16, 2011, to:

    Texas Arbor Day Poster Contest  
    c/o Texas Forest Service  
    301 Tarrow Drive, Suite 364  
    College Station, TX  77840-7896
After selecting a winning poster for your school, complete this form and include it with the poster (do not staple!) to send to the contest coordinator.

**2011-2012 School Winner Report Form**

Please include all information to expedite the process of contacting contest winners.

School name ____________________________________________________________

School address ______________________________________________________________________

City __________________________ State _____ ZIP ______________________________

School phone number (_______)_______________________________________________________

Student’s name ________________________________________________________________

Student’s home address __________________________ City __________________________ State _____ ZIP ______________________________

Name of parent or guardian ________________________________________________________

Teacher’s name _________________________________________________________________

Teacher’s email address ___________________________________________________________

**Important:**

Please indicate the number of students who drew posters in the school contest in the box to the left.

Number of teachers in school who participated in contest.

All artwork becomes property of Texas Forest Service.
Certificate of Participation

This certifies that

______________________________________

has successfully presented an understanding of environmental stewardship practices and the importance of trees.

Through artistic expression, the above named student has communicated a message of hope for the future of our planet.

Let it be known that the Texas Forest Service recognizes the unique and creative contribution offered by our state’s youth and extends special appreciation for these efforts.

Gretchen Riley, Contest Coordinator
Texas Forest Service

Teacher

TEXAS FOREST SERVICE
The Texas A&M University System
2011-2012 Texas Arbor Day Poster Contest

School Winner

This certifies that

[Signature]

has presented an outstanding creative representation of the importance of tree diversity within a community forest.

Through artistic expression, the above named student has communicated a message of hope for the future of our planet.

Let it be known that the Texas Forest Service recognizes the unique and creative contribution offered by our state’s youth and extends special appreciation for these efforts.

Gretchen Riley, Contest Coordinator
Texas Forest Service

[Signature]

Teacher

T E X A S Forest Service

The Texas A&M University System
Since 1872, Arbor Day has been celebrated throughout the United States and school Arbor Day celebrations have always played an important role.

An Arbor Day celebration can be:

- **Simple** – Plant a tree in honor of your school poster contest winner or to recognize an outstanding volunteer.

- **Inspiring** – Have your graduating class plant a tree with the younger students. This is a tradition that honors the students leaving and gives new students something to enjoy throughout their years!

- **Entertaining** – Students could compose poems about trees or perform an Arbor Day play (available at [http://www.arborday.org/arborday/ADPlay.cfm](http://www.arborday.org/arborday/ADPlay.cfm)). This could be performed for fellow students, families, or senior citizens.

Whatever you choose for your celebration – go outside and enjoy the trees and the environment that surrounds you!

---

**Celebrating Arbor Day in Texas**

The official state Arbor Day is held on the last Friday in April each year. But due to the diversity of climate zones, Arbor Day is celebrated in Texas communities anytime from November through April. Houston and many neighboring communities continue to observe Arbor Day on the third Friday in January. In south Texas, many cities celebrate Arbor Day during the second week in February. Other communities have moved their celebrations to the fall to take advantage of better weather.

**Other Tips:**

* Take your class on a tree identification hike around campus or within your community.
* Do a web search for the benefits of trees and create a list with pictures.
* Have a contest for students to find the biggest trees in the community.
* Have an essay contest where students describe the importance of trees to their community.