# **NSDAR Educational Resources Committee**



"Branches of History: Notable Trees that Celebrate the Bygone Days of America" Lesson Plan

Contributor: Dr. Kay Moore Grade Level: 5<sup>th</sup>

### 1. Identify the standards to be addressed:

NV SS.5.29. Evaluate the relationship between humans and the environment in early American history; NV SS.5.31. Analyze how physical geography and natural resources affected exploration within the settlement of people, and the development of culture in early U.S. history

## 2. Statement of the objective and lesson outcomes:

After discussing the importance of trees and hearing about how trees are celebrated, students will work in pairs to research a historical tree in a state they self-select and collect five facts about the significance of that tree to report to the rest of the class.

# 3. Materials, resources, and technology to be used by teacher/students:

Book: Arbor Day Square (2016) by Kathryn O. Galbraith (Author), Cyd Moore (Illustrator) or other info. about Arbor Day; Pictures of Arborglyphs; One computer for two students; Large paper to record facts about selected tree; Markers; Glue; Large map of the U.S.; Display area; If desired, book: Celebritrees (2011).

## 4. Introduction of the topic:

Brainstorm with students to ascertain their knowledge about Arbor Day; Read book, Arbor Day Square, or share other data about Arbor Day; Share lesson introduction (included)

#### 5. Procedure for instruction:

Each pair of students will select a state to research a historical tree. Usually the name of a state and the phrase "historical tree" in a search engine works. Five facts about the tree will be collected and neatly written on the paper. Be sure students identify the state where the tree is located. If possible, include a picture of the tree.

#### 6. Lesson closure:

Students will share their tree facts with the class after showing the appropriate state on the U.S. map. Tree fact sheets should be displayed in the classroom for student follow-up. If desired, have book, Celebritrees: Historic & Famous Trees of the World by Margi Preus and illustrated by Rebecca Gibbon (Henry Holt and Co.) available

## 7. Assessment of student understanding:

Each pair of students will find a historical tree in a state and through research, find 5 facts about that tree to share

## Lesson Introduction

Think about a tree you saw recently. Did the leaves or needles stir in the wind? Was it an evergreen or a deciduous whose leaves turn sunshine yellow or crimson red and float to the ground in fall? In warmer climates, it may have been a palm loaded with tasty dates or in colder areas, a holly with sparkling red berries. Many different species of trees grow throughout the United States.

People appreciate trees for their beauty as well as the shade and protection they provide. Through the process of photosynthesis, they produce the oxygen which living creatures breathe. One large tree can provide a day's supply of oxygen for four people. Trees remove carbon dioxide and other harmful gases out of the air. Without this, humans could not live. Trees also help prevent erosion of the soil from strong wind and driving rain and provide homes for birds and animals as well as people. While often thought of as a child's retreat, in the twenty-first century, tree house building has become trendy for adults as well. Trees can provide fruit and nuts to augment our diet. Their wood is used in many practical as well as artistic projects. Trees certainly enrich our lives in many ways.

We appreciate trees so much that we even honor trees each year with their own holiday, Arbor Day. This tree-planting celebration was the brainstorm of Julius Sterling Morton, a farmer and newspaper editor in Nebraska in 1872. It gained national recognition in 1970 when President Richard Nixon proclaimed the last Friday in April as the officially designated National Arbor Day. Most states observe that date, but others select a day in the best tree planting time in their region. In November, 2004, the United States declared the oak as the official National Tree. With more than sixty species throughout the country, it was a worthy choice, although the redwood, dogwood, maple, and pine were also considered.

Most states also have designated a species of tree as its official state tree. Often one of the selected type is planted in the state capital, but these are also represented in the National Grove of State Trees (often called the Grove), a thirty-acre site in Washington, DC. All fifty states and the District of Columbia are included, with the trees being acquired from their respective locales. Planting started in 1989 with the trees being spaced to accommodate their mature size. Each state tree has a metal sign inscribed with the name of the tree and the state it represents. The Grove is administered by the U.S. National Arboretum which was created by the U.S. Congress in 1927.

Trees are recognized as being so important that cities in the United States vie to be recognized as a "Tree City." Begun in 1976, the Tree City USA program is a national movement that guides communities in overseeing and increasing their public trees. Sponsored by the Arbor Day Foundation in partnership with the U.S. Forest Service and National Association of State Foresters, currently 3,400 communities have committed to the four core requirements:

1) maintain a board or department dedicated to the well-being of trees; 2) have a community tree policy/regulation; 3) spend at least \$2 per capita on urban forestry; and 4) celebrate Arbor Day. Do we live in a "Tree City?" We'll check on the Tree City USA program website (https://www.arborday.org/programs/treecityusa/about.cfm).

In some cases, trees themselves are viewed as having historical roots (literally and figuratively). Some trees are thousands of years old. Carvings in trees tell us about the people who passed by. Trees that are not native to an area have a story about their travels to that spot. Trees have been planted to memorialize people, events and time periods. Sometimes trees have silently witnessed significant historical happenings. Think about the "Liberty Tree" which became a symbol for the patriots in the American Revolution. We learn about the past in many different ways and exploring trees can provide historical knowledge about the United States in a

unique and fascinating manner. They also remind us that conservation is needed so that these trees and the history they record aren't lost such as in the following example:

# **Arborglyphs**

If you hike through the mountains in northern Nevada, you may spot trees, usually aspen, with carvings in their bark. These were probably made by Basque sheepherders who lived in these higher elevations during the hot summer months so their flocks could find food. It was a lonely existence and the men found entertainment in carving messages, pictures and even poems in the white tree bark for their own enjoyment and for other sheepherders to find. Today we call these carvings arborglyphs which literally means "tree writing," but they are also known as "talking trees."

Written in Spanish, Basque, French or faulty English, the carvings record the thoughts and experiences of the sheepherders from the late 1800s into the early twentieth century who immigrated to America from their homeland situated in the Pyrenees Mountains between France and Spain. The Basques speak Euskara and are believed to be the oldest native group in Europe. For some Basque families, these carvings are the only record they have of their ancestors as the men were absent when census takers recorded the population. Names, dates, hometowns and other data are visible on the trees and this carved biographical information allows people today to follow the sheepherders' movements around the West.

There is no tradition of tree carving in the Basque homeland so this habit evolved in America. When the tree bark was cut with a knife or other sharp item, black scar tissue built up on the white bark of the tree which made the design visible. Vertical lines tended to widen more than ones made horizontally. Individual taste and skill defined the appearance of the final arborglyph.

## Moore, Branches of History

But even in the best conditions, aspen trees live no more than one-hundred-twenty years. Many trees with carvings have been lost due to fires, disease, vandals and just old age. Efforts have been made to document the arborglyphs and the University of Nevada, Reno created a database of the designs. Wax-on-muslin rubbings made directly from the carvings are another method being used to preserve these botanical relics and have been displayed to the public in traveling exhibits. While written history is typically found in books and documents, these markings in the natural canvas of tree bark provide a different way of recording the past.

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<u>Sample of Five Facts</u> (to share with students as an example of the lesson task)

- 1) Old aspen trees in Nevada often have arborglyphs, carvings in the bark
- 2) These were designed by Basque sheepherders to express their feelings and record their identities
- 3) The arborglyphs are part of the historical record of the Basque people who emigrated into the U.S. starting in the late 1800s
- 4) Aspen trees only live about 120 years so people fear the arborglyphs will be lost
- 5) Efforts are being made by university personnel to catalogue the arborglyphs to save them