

Celebrate Arbor Day: A Guide for Schools

The History of Arbor Day

Arbor Day's origins began on the windswept, treeless plains of Nebraska as the idea and a dream of one man and grew into a reality that has spread nationwide. The father of Arbor Day was Julius Sterling Morton (1832-1902). He and his wife settled in Nebraska in 1855 where he became editor of the Nebraska City News. Using his background in agriculture, he introduced a number of modern agricultural advancements through editorials and features in his paper. He became actively involved in the area's politics and served in the Nebraska territorial legislature, was secretary of the territory and for a time served as acting territorial governor. During this time he continued to develop new farming technologies and advocated them through his journalism.

After Nebraska gained statehood in 1867, Morton was appointed to the State Board of Agriculture. He served as secretary of agriculture under President Grover Cleveland and was president of the American Forestry Association from 1893-1897.

Morton believed that the Nebraska prairie would greatly benefit from the planting of trees. Trees would shade and bind the soil, reduce the rate of erosion and water evaporation and make it less vulnerable to the wind. A badly needed source of lumber would find a ready market. He began planting trees around his farm and urged his neighbors to do the same. When he became a member of the state board of agriculture, he proposed that a special day be set aside on which to encourage the planting of trees statewide. Prizes would be awarded to the county agricultural society and to the individual who planted the most trees. His dream became a reality, and on that first Arbor Day, April 10, 1872, over a million trees were planted!

Arbor Day was celebrated again in 1884. In 1885, a law was enacted by the state legislature making Arbor Day an annual legal holiday. During the next 16 years, over 350 million trees were planted in Nebraska, and today the state has a national forest covering 200,000 acres.

Within three years after Nebraska proclaimed the first Arbor Day, Kansas, Tennessee and Minnesota followed suit. Ohio's first observance was in 1882. Cincinnati's schools were closed for the day, and thousands of children took part in festivities that included a parade, brass bands, banners, a 13-gun salute, speeches, poetry recitations and refreshments.

In 1883, the American Forestry Congress adopted a resolution that called for all schools throughout the country to observe Arbor Day. Two years later, the National Education Association adopted a similar resolution.

In 1970, President Nixon, under the terms of a joint congressional measure, issued a proclamation that designated the last Friday in April as National Arbor Day. All 50 states, Puerto Rico and some U.S. territories have since passed legislation adopting Arbor Day, which is celebrated on a date appropriate for tree planting in their region.



Arbor Day in Alaska

In Alaska, Arbor Day was first established by state law in 1966. In 1973, the law was amended to change the date Arbor Day is celebrated from the first to the third Monday in May. Since then, school children, parents and volunteers have celebrated Arbor Day throughout Alaska, and many locations throughout the state have been established as Tree City USA designations. Arbor Day has become more important in light of the changes taking place in our cities and throughout the countryside as a result of forest tree pathogens, insect infestations and slowly changing forest environments. Fairbanks, for instance, has a very active Arbor Day committee that sponsors tree planting by students throughout the city at schools and parks. The committee's efforts help teach our youth of the value and importance of managing and maintaining trees for our enjoyment and the many products they provide.

Arbor Day Celebrations in the U.S.

The most widespread observance of Arbor Day in the United States is in public schools under the auspices of individual state laws. Activities often include pageants, displays, talks on the value of trees and tree-planting projects. Civic organizations, service clubs, youth groups, sports organizations and conservation groups also plant trees in cooperation with state conservation or forestry officials. Trees may be planted on the grounds of public buildings, along highways, in parks or on private property. Each year on national Arbor Day, the president or first lady plants a special tree on the White House grounds.

Planting trees is just a starting point. A more important aspect of Arbor Day is the opportunity to educate the public about the value and importance of trees' ecological and economic roles. Public awareness and understanding is central to wise resource use. Trees are one of our most vital resources. There are a variety of activities that can take place on Arbor Day and before, especially in our schools.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

*Section 1. AS41.15 is amended to read:

Sec. 41.15.400. OBSERVANCE OF ARBOR DAY. To increase public awareness of the vital importance of the conservation and propagation of trees and forests to the everyday life of the citizens of Alaska, the third Monday in May of each year is designated "Arbor Day." It shall be observed by appropriate school assemblies and programs and may be the occasion for other suitable observances and exercises by civic groups and the public in general.



Ideas for School Celebrations of Arbor Day

Schoolwide Activities

- Hold an all-school assembly using an Arbor Day theme.
- Plant trees on school grounds and learn how to maintain them.
- Sponsor poster, poetry, essay or speech contests.
- Hold a classroom door decoration contest.
- Offer prizes to the best decorated classrooms and bulletin boards.
- Attend or participate in local tree-planting ceremonies.
- Support a neighborhood improvement project, such as reclaiming a vacant lot or making a park.
- Collect birch sap and make birch syrup, or partner with someone in the area who is making syrup.

Science

- Plant and cultivate tree seeds.
- Study the ecosystem of one particular tree.
- Take a nature walk and learn to identify local trees by sight, touch and smell.
- Display photos and samples of local trees, leaves, bark, wood, seeds, cones or flowers.
- Study a tree's structure, function and life history.
- Try counting the annual rings on a piece of a tree.
- Study the classification of trees — broadleaf, needle-leaf, evergreen and deciduous. Learn about their differing needs and geographic distribution.
- Make a tree twig collection and key.
- Study plant succession within your local area or state.
- Learn why trees are a renewable and sustainable resource.
- Learn about the life cycle of the spruce beetle and how this forest pest decimates our spruce forests periodically over time.

- Learn how lumber is made. Visit a lumber mill.
- Lead students in a study of forest pests, diseases and insects that seem to be attacking our forests and discuss the possible reasons and outcomes.
- Identify common Alaska trees in the schoolyard by their twigs and bark.
- Learn about wildlife uses during different successional stages of forest development and the importance of each stage to wildlife variety and abundance.
- Make a display of the different kinds of wood in your area.
- Visit a reforestation project. Take part in such a project.

Social Studies

- Study or read the history of Arbor Day.
- Correlate the history of the U.S. to one tree's growth rings.
- Study the role of the timber industry in economics.
- Study the availability of wood to home styles around the world — log, plank, post and beam, framework for mud, etc.
- Study the current impact of agriculture on the world's forests.
- Study the distribution of the world's forests.
- Study the use of locally obtained woody biomass as a replacement for fuel oil, especially in remote, forested communities.
- Learn about the different types of logging methods and the controversies surrounding them.
- Study the effect of browsing animal herds on tree cover.
- Look at firewood use and how it has affected agriculture and air quality.
- Examine Native culture in your area for the use of local wood in homes, art and utensils.
- Study non-timber forest products to learn about other commodities that come directly from trees, such as

Birch bark container



Students sharing birch syrup

nuts, birch syrup, medicinal products, berries, jams, jellies, chaga, mulches, etc.

- Learn about the importance of wildfire prevention for protecting homes and communities and how new forest ecosystems are created with fire.

Art

- Make a poster advertising Arbor Day.
- Paint or draw trees.
- Make a collage with trees as the theme.
- Do a project using parts of trees such as bark, leaves and seeds.
- Make mobiles from tree parts or from wood.
- Make coasters or necklaces out of tree cross sections.
- Make wreaths and sachets using leaves, branches and needles.
- Make rubbings of tree bark, leaves or cross sections.
- Make things out of cones.

English

- Write or read poems, limericks, essays, short stories or plays using trees as a theme.
- Write descriptions of trees from different perspectives, such as a farmer, a lumberman, a forester, a preservationist, a land developer, a blind person, an insect, a tree-dwelling bird or mammal, a desert dweller seeing his first large tree or a forest-dwelling aborigine.

Vocational

- Study the different types of wood — hard or soft — and the best uses for each.
- Make something out of wood using its grain to the best advantage.
- Learn about the various non-timber forest products and their importance to local people and their economies.

- Visit a sawmill or lumber yard and learn about the production and storage of wood products.
- Learn about the different ways to finish wood.
- Visit a logging operation.
- Visit a company that makes birch syrup in the spring.
- Have a forester visit your school and talk about what foresters do.

Home Economics

- Find out about spices and other foods and the trees that produce them.
- Study fabrics and their plant sources.
- Make a food using as many tree-derived ingredients as possible, such as apples, cocoa, coconut, cinnamon or dates.
- Examine wood burning as a source of home heat. What type of wood is most suitable for burning? Study costs and sources of wood fuel.
- Study how to split, stack and season firewood to increase wood stove efficiency, conserve the wood resource and decrease air pollution.

Physical Education

- Play tree tag. When the person who is IT calls out the name of a tree, all children must run to a branch or tree of that type. If a person is caught before reaching a safe spot, that person becomes IT.
- Play a game. Side one chases side two whenever a true statement about a tree is spoken, and side two chases side one when a false statement is said. Those tagged must join the other side or sit out the rest of the game.
- Try interpretive dancing, pretending to be a certain type of tree, such as a tall redwood, a weeping willow, a tree in a violent storm, a tree in a parched desert that awakens to rain or a tree being cut down.

Mathematics

- Compute timber volume in board feet and calculate how many houses could be built from a certain amount.
- Learn what units of measurements are used by carpenters and other people in the construction industry. Work out problems using these units.

- Use trees as the subject for the day's math problems.
- Use a simple cloth seamstress's tape to measure the circumference of several trees at 4½ feet above the ground and then use measurement to find their diameters.
- Figure out how tall a tree is by using an angle device at a set distance from a tree.

Some Interesting Facts about Trees

- The tallest tree in the world is a California redwood measuring 379.1 feet.
- The thickest tree is a Montezuma bald cypress near Tule, Oaxaca, Mexico that is 40 feet in diameter.
- The most massive living thing on earth is the General Sherman tree in Sequoia National Park. It is 272 feet tall and has a trunk 36 feet wide. It dates from 1,000 BC.
- The oldest tree is a 9,550-year-old spruce in the Dalarna province in Sweden.
- The traveler's tree in Madagascar stores a pint of water inside the base of each of its long leaf stalks.
- The baobab of Africa has a trunk so large (25 feet in diameter) that hollow trees are often used for houses.
- The banyan tree extends trunk-like roots from its branches and in time may cover acres of ground.
- The ombu of Argentina is so hardy that it can survive insects, storms and heat. Its wood is so moist it won't burn and so spongy it can't be cut down.
- The largest seed is from the coco-de-mer (a double coconut palm) of the Seychelles Islands and weighs up to 50 pounds.
- A large elm tree can have over 6 million leaves.
- The Alaska tamarack is a deciduous conifer. It loses its needles each year and has cones similar to those of the black spruce.
- More than 40 billion board feet of lumber is cut each year, enough to build a boardwalk 30 feet wide and 1 inch thick to the moon.
- The only living and growing part of a tree trunk is a narrow band of cells toward the outer edge called the cambium. Most of the trunk is made of dead cells called xylem that compose myriads of hollow water conducting tubes.

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