



An Introduction to Schoolyard Forests

Our scalable, nature-based approach

As the climate warms, asphalt-covered school grounds have an increasingly negative effect on children's well-being. Schoolyard forests protect children and their communities and have health, learning, and environmental advantages. With thoughtful planning, schoolyard forests can be a long-lasting way to benefit the entire community.

The Need

Across California, more than 10,000 public schools serve 5.9 million PK-12 students on approximately 130,000 acres of public land every day. Most of that land is paved with hot asphalt surfaces and lacks tree canopy in places children spend their time. This means that millions of PK-12 students are exposed to unhealthy high temperatures on a regular basis. As temperatures continue to rise due to climate change, these stark campuses pose increasing health risks for children when they are outdoors, and also increase indoor temperatures and cooling costs.

Since children are more vulnerable to heat than adults, this is a problem for all schools in California. However, the lack of tree canopy and green space creates a significant, disproportionate burden on school communities with the lowest incomes and in communities of color, which already face environmental, economic, and racial injustices.

Adding shade trees to schools that serve the most vulnerable populations will not only reduce extreme heat and environmental justice issues but will also address other stark inequities in access to green space, hands-on educational resources, and health and wellbeing.



What Are Schoolyard Forests?

Schoolyard forests are climate oases on school campuses that are designed to benefit students, the community, and the environment. Key aspects include:

- **Shade:** Trees are planted in groves designed to shelter students.
- **Diversity:** Many different climate-adapted trees are featured, including large, shade tree species.
- **Participation:** Students are engaged in the design, planting, and care of the forest.
- **Outdoor Learning:** Spaces support outdoor learning and play in nature.

Benefits of Schoolyard Forests

Health and wellness

Shade protects children against heat and allows for increased physical activity. Exposure to nature and green space has been shown to improve social-emotional wellness, mental health, and healthy eating habits.

Climate resilience

Replacing barren asphalt with forests can reduce heat island effects, capture carbon, decrease schools' energy consumption/cooling needs, and improve stormwater management.

Learning benefits

Using on-campus green spaces for teaching and breaks can increase hands-on learning, environmental literacy, attention span, and academic performance.

Community benefits

Schoolyard forests, and the process of creating and maintaining them, provide opportunities for family engagement, community cohesion, and stewardship.



The California Schoolyard Forest SystemSM

The California Schoolyard Forest SystemSM was founded by Green Schoolyards America in collaboration with the California Department of Education, the California Department of Forestry and Fire Protection (CAL FIRE), and Ten Strands. The initiative seeks to create schoolyard forests across PK-12 public school grounds in California to directly shade and protect students from existing heat and rising temperatures due to climate change.

Goals

- Plant enough trees to cover at least 30% of each school property with tree canopy in the areas children use during the school day.
- Center equity by prioritizing schools and districts in under-served communities with the highest poverty level, fewest trees, and hottest climates.
- Use school grounds as a PK-12 learning laboratory across the curriculum and grade levels.
- Build environmental and climate literacy by engaging students in standards-based hands-on research, design, planting, and stewardship of their schoolyard forests.

Programs and strategies

- Build awareness and networks of support at state and local levels.
- Align state and local policy, funding, and planning.
- Provide resources and technical assistance to school district leaders.

Funding for the initiative was provided by a grant administered by the California Department of Forestry and Fire Protection Urban and Community Forestry Program and private philanthropy.

For more information visit our website

greenschoolyards.org/schoolyard-forest-system

