



Bill's Backyard: Bridge to Nature San Jose's Newest Outdoor Learning Environment Doubles Museum's Exhibit Space and Connects Kids to Nature

After 27 years of creating interactive exhibits inside, the museum burst through the purple walls to the outdoors, opening **Bill's Backyard: Bridge to Nature** in 2017. Ten exhibit areas on one half-acre bring science and environmental education and imaginations to life for the nearly 400,000 children, families and teachers that visit each year. Children have fun digging, rolling, climbing, building, learning and exploring while families learn about rain water harvesting, drought-tolerant gardening, animal habitats, solar energy, and much more.

The innovative design is a hybrid of a nature park and a playground with familiar features from both, with the goal of helping parents feel comfortable and confident in their children's ability to navigate the natural world.

Bill's Backyard: Bridge to Nature Fun Features:

Tree Climber: Imagine playing in a giant tree house. This specially designed structure representing Blue Oak woodland encourages children to climb in and around the trees and trek across the suspension sky bridges.

Lookout Tower and Tunnel: See the world from a whole new perspective. Children can scurry through the cave-like tunnel on their way to the Lookout Tower. Once in the Tower, they can survey Bill's Backyard below before they slide back down to the ground.

Jr. Ranger Station: Explore local features and creatures. Maps, signs, fossils and touchable animal skeletons introduce families to native species and potential animals they'll encounter locally. The roof of the Jr. Ranger Station is an active, living roof with native plants that attracts humming birds, butterflies, and other pollinators.

Fort Building: Solve problems and build. Reeds, grasses, willow branches and flowers inspire children to design, build, and create their own dwellings with natural materials.

Dig Pit: Explore and dig. A giant pit filled with stones provides busy youngsters hours of shoveling, digging, scooping and relocating gravel, rocks, sand, and dirt.

Dry Creek: Learn and play with water and rocks. A dry creek bed where rocks can be re-arranged creates fun and empowering experiences for children of all ages. Collection basins turn this area into a water play experience during the rainy season.

Drought-tolerant Garden: Experience a gardener's life. Raised planter beds provide children the opportunity to prepare soil, plant seeds, and learn where their food comes from.

Rain Harvest System: Discover water-saving techniques. A 7,200 gallon system captures rain water that irrigates Bill's Backyard and role-models strategies for water stewardship.

Tree of 40 Fruit: Enjoy the beauty of art, science, and agriculture. Grafted with 40 different local stone fruit varieties by Artist Sam Van Aken, this innovative tree highlights the intersection of science and art. It also provides a shady storytelling area.

Outdoor Pavilion: Participate in organized outdoor activities. This outdoor classroom is a versatile and shaded space for facilitated activities and nature investigations.

Bronze Animals: Look for the life-sized animals. True to form, bronze animals appear throughout the backyard in their natural habitats. Find a bobcat hidden in the bushes and rocks, a beaver in the dry creek bed, and the acorn woodpecker in the Blue Oak woodland of the Tree Climber.

WHY GO OUTDOORS?

Childhood has moved indoors in less than one generation. The museum is part of an international movement aiming to reverse this trend. Research shows a direct connection between daily exposure to nature and children's emotional and cognitive well-being.¹ Children who are allowed to freely play outside build essential skills like critical thinking, problem-solving, creativity, risk-taking, and cooperation.² They also tend to be fitter and are healthier overall and more likely to support the environment as adults.³

As leaders in early childhood education and STEAM learning, the museum's goals for **Bill's Backyard** are:

- to support the development of critical skills needed for children to be successful
- help the next generation acquire environmental and sustainability behaviors
- role model for adults planet-friendly systems to help adapt to a changing environment

Imagine watching kids at play in **Bill's Backyard: Bridge to Nature**, and realizing that:

- today's plant waterer is tomorrow's drought management expert
- today's insect lover is tomorrow's environmental steward
- today's composter is tomorrow's environmental engineer
- today's dirt digger is tomorrow's healthy soils leader
- today's tomato harvester is tomorrow's innovative farmer
- today's rock sculptor is tomorrow's artist-in-residence

TOTAL COST OF PROJECT: \$3.5 Million

MAJOR DONORS: Agilent Technologies*, California Coastal Conservancy, City of San Jose, FIRST 5 Santa Clara County, Santa Clara County Open Space Authority, Santa Clara Valley Water District, Sunlight Giving Foundation, SuperBowl 2016 Legacy Fund

**Bill's Backyard is named after long-time supporter and museum board member, Bill Sullivan, retired CEO of Agilent Technologies.*

PROJECT PARTNERS: BFK Engineers, Bothman Construction, Brad Cox Architects, City of San Jose Office of Cultural Affairs, City of San Jose Parks & Recreation Department, City of San Jose Department of Public Works, Clean Solar, Cost of Wisconsin, Guadalupe River Park Conservancy, Mark Brest Van Kempen, Artist, MIG Landscape Design, Our City Forest, San Jose Arts Commission, San Jose Conservation Corps & Charter School, San Jose Parks Commission, Santa Clara Valley Open Space Authority, Santa Clara Valley Water District, Scientific Art Studio, Silicon Valley Ironworks, SunPower, Toeniskoetter Construction, WaterSprout.

^{1,2,3} Selected excerpts from *Children and Nature Network* (www.childrenandnature.org/research), *Annotated Bibliographies of Research and Studies, Volume 1 7 2 (2007)* and Richard Louv, *Last Child in the Woods*, (Alonquin Books, 2005,2008)