

FOR IMMEDIATE RELEASE
October 8, 2014

Press Contact: Nina Sazevich, (415) 752-2483; nina@sazevichpr.com

Aquascapes: The Art of Underwater Gardening **At the Conservatory of Flowers**

November 13, 2014 through April 12, 2015

SAN FRANCISCO -- Dive into the dazzling world of aquatic plants in a new exhibition of tropical underwater gardens at the Conservatory of Flowers in Golden Gate Park. Visitors go 'below the surface' as they stroll past lush, living aquascapes, imaginatively crafted to highlight the diversity of freshwater tropical waterways.

Aquascaping, the art of creating stunning underwater landscapes with plants, stones and wood, is a popular international gardening trend. Annual competitions attract hundreds of elaborate entries from around the world. The beautifully planted aquariums can mimic everything from primeval forests to verdant valleys or can become sublime works of underwater abstract art.

Aquascapes: The Art of Underwater Gardening features a dozen tanks ranging from 4 to 6 feet long, set into the walls of a partially enclosed cavern-like setting that gives visitors the feeling of being down in a cenote. Nine of the tanks (three each) take their inspiration from Africa, Asia and South America, making use of native plants, rock, hardwood and fish to evoke the natural landscape of these tropical places. Three additional tanks are being created by local aquarium experts from San Francisco's Ocean Treasures and will highlight the more abstract artistic possibilities of aquascape design.

“Aquascaping is enormously popular around the world, particularly in crowded cities and colder countries where outdoor gardening isn't possible, but it isn't so familiar to American audiences,” says Lau Hodges, Conservatory Curator. “I'm hoping we can change that with this exhibit because aquascaping offers urban audiences an exciting new possibility for apartment gardening – one that really allows the inner science geek and inner artist to express themselves. It's gardening for the maker culture, really.”

History and Practice of Aquascaping

Aquascaping, with its focus on aquatic plants (not fish) and their artful arrangement, began in earnest in the 1930s in the Netherlands. Freshwater aquarium equipment became commercially available, and Dutch aquarists began to experiment with arranging various types of plants with diverse leaf color, size and texture in terraced heights, much like a terrestrial flower garden. These wonderfully crowded underwater gardens left little room for decorative rock or driftwood.

In the 1990's however, Japanese aquarist and photographer Takashi Amano introduced the world to his "nature aquarium" style. Amano masterfully made use of the Zen aesthetic practice of rock and plant arrangement to create minimal, but stunning works of living art. Using just a few species of plants and carefully selected stones or driftwood, Amano's aquascapes evoked serene landscapes in miniature -- mountain ranges, peaceful grass fields and quiet forests. Schools of fish, usually limited to just one or two species, appeared to fly like flocks of birds through these panoramic vistas. Amano's three-volume series, *Nature Aquarium World*, featuring breathtaking photographs of his aquascape designs, sparked a wave of interest in aquarium gardening.

Early Dutch hobbyists began the practice of aquascape contests, but heightened interest in the wake of Amano's work led to the establishment of many others that now attract hundreds of entries from around the world including those sponsored by the Aquatic Gardeners Association in the U.S., Aqua Design Amano in Japan, AquaticScapers Europe in Germany and many others. Entries are judged not only on composition, but also on the viability of the aquascape.

Aquascapes are a fine balance between form and function. An aquascape is an ecosystem in which every living and non-living item contributes not only to the overall beauty of the aquarium, but also to the chemical and biological balance that allows the plants and any animals to live. Consideration must be given to lighting, carbon dioxide levels, filtration, algae control, fertilization and more. Plants and fish work together to process waste and aerate the water. Rocks and gravel provide shelter for beneficial bacteria that reduce toxicity from waste. Even the

position of the wood and rock affects the health of the tank by allowing or impeding the flow of water.

Underwater Plants

True water plants, or hydrophytes, are those that live totally submerged. They have adapted to life in the deep in several interesting ways and visitors to the exhibit will get a chance to learn about these fascinating survival strategies.

Hydrophytes, when removed from water, often hang limply. Normally supported by the water around them, they lack strengthening tissue in their stems and leaves, allowing for greater flexibility in the event of water level change or water movement. They also lack external protective tissue needed by land plants to limit water loss. This allows all of the surface cells to absorb water and nutrients, reducing the need for an extensive root system. Roots primarily function as anchorage or are dispensed with entirely, allowing the plants to float freely. Leaves are often highly dissected or divided, a specialization that creates a larger surface area for absorption and photosynthesis and minimizes water resistance. Air-filled cavities often extend through the leaves and stems, providing an internal atmosphere. Certain fly and beetle larvae have taken unusual advantage of this, piercing the cavities with sharp appendages to create a personal oxygen source.

Some of the many unusual water plants that appear in *Aquascapes: The Art of Underwater Gardening* include the Madagascar lace plant, one of the most highly prized in the hobby. Its leaves are broad and long with a very delicate lace-like appearance. They were so much in demand by botanical gardens and hobbyists in the past that they almost became extinct in their natural environment. The Amazon sword plant is a popular rosette plant with lance-shaped leaves that can reach 20 inches in height. The grass-like bamboo plant (*Blyxa aubertii*) can be found naturally in habitats throughout Asia as diverse as rice paddies and swiftly flowing streams. Other featured plants include the African water fern, Java fern, pygmy chain sword and more.

The Conservatory will provide details on its website about the contents of each tank including substrate, stones, hardwoods, plants and fish for any interested professional or would-be aquascapers. Some of the tanks will be available for purchase by the public and can be taken home once the exhibit closes. Details will be posted to conservatoryofflowers.org.

Aaron John Gregory of Ocean Treasures, who is working on several tanks in the exhibit, hopes, above all else, that visitors will be spellbound. “These aquatic environments are meant to be soaked in slowly ... to catch your eye and pull you in until you feel like you are slowly floating through vibrant underwater forests, swaying with the hair grass, and sheltering in the towering sword plants. The harmony of the plants and fish intermingling among jagged rocks and twisting driftwood is simply mesmerizing.”

Media sponsors for *Aquascapes: The Art of Underwater Gardening* include KQED Public Broadcasting.

***Aquascapes: The Art of Underwater Gardening* is open Tuesdays – Sundays from 10 am to 4 pm and is included with admission to the Conservatory. Admission for San Francisco residents (with proof of residency) is \$5 general; \$3 youth 12-17, seniors and students with ID; \$1.50 children 5-11; children 4 and under FREE. Admission for non-residents is \$8 general, \$5 youth 12-17, seniors and students with ID; \$2 children 5-11; children 4 and under FREE. The public should call (415) 831-2090 or visit www.conservatoryofflowers.org for more information.**

Background

The Conservatory of Flowers is a spectacular living museum of rare and beautiful tropical plants under glass. From Borneo to Bolivia, the 1,750 species of plants at the Conservatory represent unusual flora from more than 50 countries around the world. Immersive displays in five galleries include the lowland tropics, highland tropics, aquatic plants, potted plants, and special exhibits. Opened in 1879, the wood and glass greenhouse is the oldest existing conservatory in North America and has attracted millions of visitors to Golden Gate Park since it first opened its doors. It is designated as a city, state and national historic landmark and was one of the 100 most endangered sites of the World Monuments Fund.

###