



Exposed: The Secret Life of Roots



East Gallery

February 21 through October 13, 2015

Hidden Treasures

Plant roots are vital components of the earth's ecosystem. They are necessary for all plant growth, including the production of food and nutrients for human and animal organisms. However, as root systems are out of sight, their beauty and importance often go unnoticed. *Exposed: The Secret Life of Roots* showcases the hidden world of roots through visually stunning root representations using the work of agricultural ecologist Dr. Jerry Glover, sculptor Steve Tobin, and photographer Jim Richardson.



Photography and Sculpture

Jim Richardson is a photographer for the National Geographic Society. His photographs in this exhibit capture the disparity in the aboveground and belowground parts of plants. His series on soil profiles, hung in the Classroom and National Garden (spring through fall), highlight striking differences in global soils and the hidden world of roots.

Steve Tobin is a celebrated sculptor who specializes in nature-inspired works. Two of his pieces on display spring through fall on the U.S. Botanic Garden's *Juliet*, are bronze casts of tree roots washed out from a riverbank. The other two sculptures are from his *Steelroot* series.

Roots Exposed

Agricultural ecologist Dr. Jerry Glover studies the importance of healthy soils and their relationship to plants. While working at The Land Institute in Salina, Kansas, he developed a method of growing and preserving plants.

Plants are grown in "root tubes," 10-foot sections of 12-inch diameter PVC pipe containing a special baked clay material. After removal from the tubes, plants are treated with glycerin and water solution to prevent them from rotting. See these preserved plants in the East Gallery.

International Year of Soils

Soils are layers of minerals and organic matter that are critically connected to a diverse array of organisms from worms to bacteria. They are the foundation of life on land and are a crucial component of global nutrient and water cycling. Soils are also fragile and largely non-renewable, and thus their conservation is extremely important. Learn more about soils in the National Garden spring through fall.

Terrace Plantings

The raised beds on the Conservatory Terrace feature living displays of plants found throughout *Exposed: The Secret Life of Roots*. Highlights include "root tubes" (showing their underground roots, leaves, and stems) and native prairie plants. Explore both the dried and live versions (spring through fall) of these prairie plants in the Conservatory Terrace and East Gallery.

- **Check out the American Roots Concert series, celebrating the "roots" of American music!**



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