

Growing Strong

By Carol Ann Fugagli

The growth of a tree can be compared to the development of a child: fragile at infancy, gangly and vulnerable when young, strong and sturdy when fully grown. UGWA's Seedlings to Saplings program is a native tree nursery cared for by young adults who develop along with the growing trees. I receive great pleasure watching an adolescent standing among the Velvet Ash, Arizona Sycamore, Ponderosa and Piñon Pine, Netleaf Hackberry, Chokeycherry, Arizona Cypress, and numerous other species that thrive first in our nursery and then in our arid landscapes.

We purchase seedlings from the Forestry Division's Conservation Seedling Program. This program offers low-cost seedlings to plant for reforestation, erosion control, windbreaks, streambank restoration, and wildlife habitat improvement. UGWA's paid interns nurture the plants until they are robust before placing them in the ground for local restoration projects—such as along the banks of the San Vicente Creek in Silver City. The many benefits that trees give our planet are well known and include helping with climate change mitigation, storing carbon, providing cooling shade, and increasing water infiltration.

One necessary component most tree nurseries lack is nourishing soil in which to grow the trees while they mature. Fortunately, we've got that covered! Our New Earth Project generates a living compost or "microbial inoculant." This growing medium is ideal since it's comprised of trillions of living bacteria, fungi, protozoa, and nematodes which are necessary for healthy plant growth. A key component of this substrate is the presence of mycorrhizal fungi. This type of fungi forms a microscopic network of threads called mycelium that wrap around or bore into tree roots. This network allows trees to communicate with each other and exchange nutrients, water, and carbon. Around 90% of plant species depend on this relationship. This fascinating microscopic world is largely uncharted territory, and science is just scratching the surface of discovering the mysteries that lie beneath the soil.

In the meantime, UGWA is taking advantage of the natural progression from creating vibrant soil to growing trees!