PHOTOS BY SANDRA D. LYNN

This cactus (*Opuntia* sp.) was among plants salvaged from alongside U.S. Highway 62/180 as part of a rescue effort led by the Native Plant Society of New Mexico. Experts are unsure if this plant is an escaped cultivar rather than a wild native.

Rooted in Place

Roadside plant rescue honors desert plants

Thanks to the work of volunteers from across the state and from several organizations, 2,430 plants were saved from the bulldozers along the highway corridor.

A DRIVER HEADED SOUTH to El Paso, Texas, from the small town of Carlsbad, New Mexico, will find almost no opportunities to buy gas or make a pit stop. No fast food. No reliable cell phone service. The highway runs through an unpopulated but dramatically scenic section of the Chihuahuan Desert. Passing by Carlsbad Caverns National Park and curving under the magnificent prow of Capitan Peak in the Guadalupe Mountains National Park, U. S. Highway 62/180 is in no way your typical American highway.

The most conspicuous residents along the 30-mile section of highway between Carlsbad and the Texas line used to be two species of tall, old yuccas – *Yucca torreyi* (Torrey yucca) and *Yucca elata* (soaptree yucca). Keeping company with yuccas in the right-of-way were more than 20 species of cacti, including New Mexico's endangered Scheer's pincushion (*Coryphantha robustispina* ssp. *scheeri*). Agaves, sotols and ocotillo – distinctive Trans-Pecos plants – also flourished there amid other small shrubs, wildflowers and grasses.

When the Native Plant Society of New Mexico board of directors learned that the outmoded two-lane road was to be widened into a four-lane, the recognition that these and other valuable plants were about to be bulldozed inspired a multi-

organization, volunteer-led rescue effort.

Volunteer Jim Nellessen – a botanist and the society's conservation chair – led the effort, which received support from the New Mexico Department of Transportation and the federal Bureau of Land Management, which agreed to provide necessary permits and to factor the project into their planning. National Fish and Wildlife Foundation presented the society with a matching grant of $10,000 toward expenses that helped them begin the salvage work in summer 2006.

Today, as Dave Ferguson admires the 18-foot Torrey yucca that he and his colleague Stan Schug wrested from the rocky terrain and transported to Albuquerque, he smiles and says, "We must have been crazy to think we could do it by ourselves." But they did.

The curators with Albuquerque's Rio Grande Botanic Garden intended to save some yuccas and came prepared to Highway 62/180 with a flat-bed trailer. With hours of hard labor behind them, this largest yucca now stands in the garden's desert collection, along with smaller yuccas also rescued. It looks disheveled after its ordeal but survives, and Ferguson, curator of the botanic garden's desert collection, says success with transplanted yuccas requires patience.

The New Mexico Museum of Natural History and Science in Albuquerque is also home to some of the refugee plants. The garden surrounding its building is considered a museum exhibit, displaying plants and rock indigenous to various regions of the state. Gary Runyan, who oversees the garden, accompanied other volunteers on one of the rescue trips and brought back several species of cacti and other plants. They are now rooted in south-facing, sun-bathed parts of the museum garden, along with some other émigrés from the same region.

Thanks to the work of volunteers from across the state and from several organizations, 2,430 plants were saved from the bulldozers along the highway corridor. Because they had been vital to the visual quality of the highway, it originally was hoped that some of them – particularly the larger, older ones – could be restored to the right-of-way and rest areas. That objective, however, has proven problematic because of the years required to complete the highway widening. So while a few have been stored for that purpose, most of the plants have been donated to public gardens and spaces in El Paso and New Mexico or sold in public permitted plant sales, a legal alternative to the burgeoning illicit trade in stolen cacti and succulents.

In these ways all the plants salvaged from the highway construction contribute to the public's knowledge and appreciation of the unusual plants of the Chihuahuan Desert. On a larger scale of importance, plant rescues – which are taking place all over the United States – can achieve another end: the maintenance of genetic diversity. This particular rescue involved highway plants, and as Jim Nellessen explains, "Within the individuals being saved are unique combinations of genes."

"Keeping them alive keeps those combinations alive, and, if they are propagated, then the gene combinations continue. Ecotypic differentiation in plant species along roadsides is a phenomenon that is well documented in scientific literature. Plants along roadsides have experienced a slightly different suite of environmental variables than plants elsewhere."

Besides the obvious value of saving individual plants and their potential genetic contributions, perhaps the most significant result of such a rescue is public education. Participating in or just hearing about a plant rescue effort helps people become aware of the true cost of development and construction to lives that are rooted in place. — Sandra D. Lynn

FROM TOP RIGHT *Echinocereus dasyacanthus* is a rescued plant now at New Mexico Museum of Natural History and Science. Horse crippler (*Echinocactus texensis*). Torrey yucca (*Yucca torreyi)* with Dave Ferguson at Albuquerque's Rio Grande Botanic Garden.