

# Ecological Restoration Brief

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## **“Digging” into the Past and the Present of Beautiful Natural Places**

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It is human nature, when introduced to thoughtfully designed and passionately cared for botanical gardens or green spaces in general, to almost effortlessly slip into a semi-trance while enjoying the beauty and tranquility of the place, including the sights, smells, and sounds of the experience. A visit to Chihuahuan Desert Research Institute’s (CDRI) Nature Center and Botanical Gardens is just such a place.

Many of us enjoy delving a bit into the history of these serene natural places, learning about the sources of inspiration, vision and energy which helped create and continue to give rise to the physical space in the present.

CDRI was formed in 1974; its 507 acre land site was acquired a few years later in two related events. The first 240 acre parcel was purchased in 1978 with the acquisition of 267 contiguous acres occurring in 1984 following the exercise of a purchase option in the original contract.

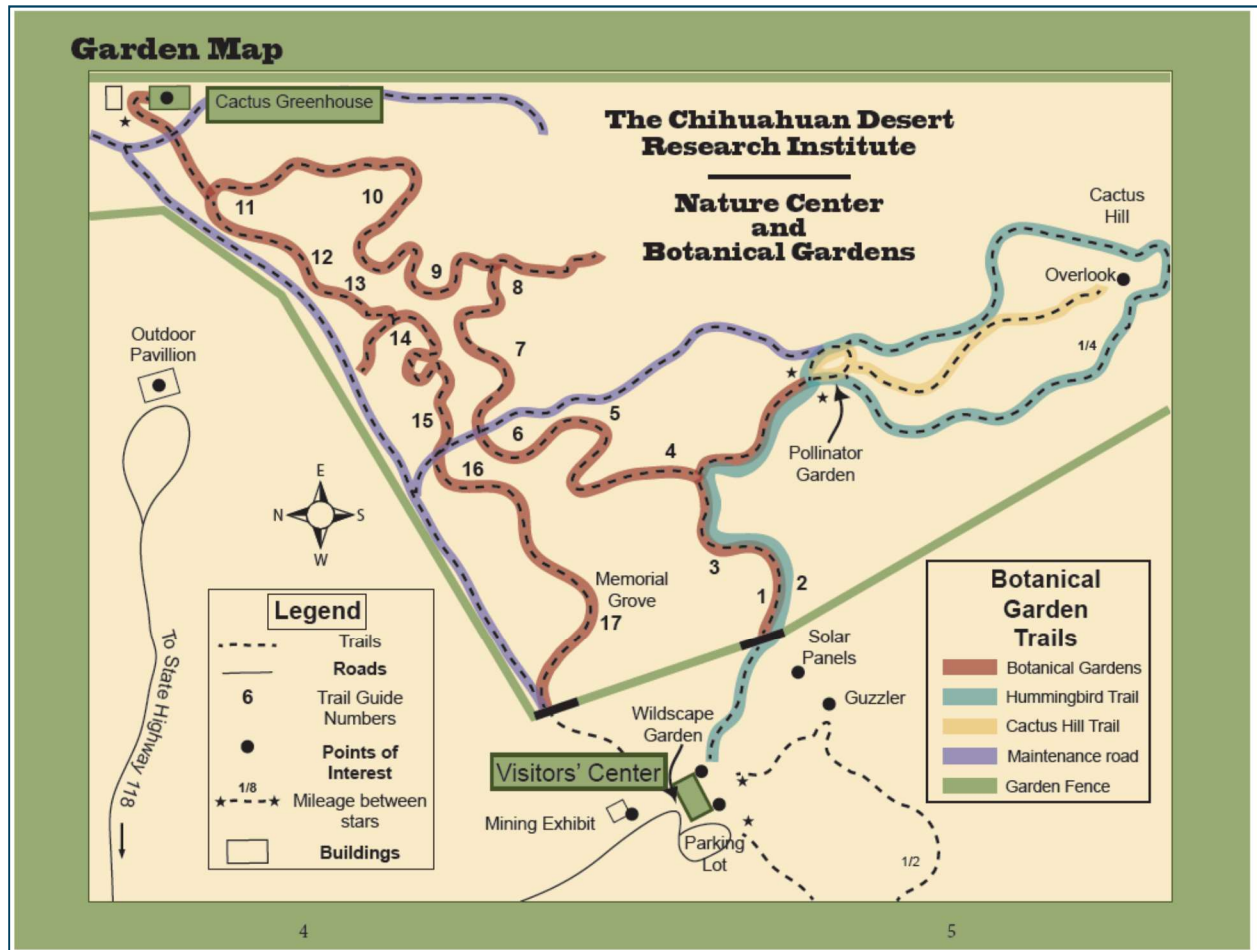
Today’s 18+ acre Botanical and Pollinator Gardens, as well as the 1,600 sq. ft. Cactus and Succulent Greenhouse, began taking conceptual shape in 1983 (under the name Chihuahuan Desert Arboretum) envisioning a living collection of over 200 species of trees and shrubs. Pictures from both the Greenhouse and the Pollinator Garden are found below.

Thirty four years later, the CDRI Nature Center has thoughtfully planted and maintains native plants in a variety of areas including: i) a Wildscape Garden and porch perimeter beds ringing the Powell Visitor Center; ii) the Botanical and Pollinator Gardens (more later); iii) the Memorial Grove of Chinkapin oaks (*Quercus muehlenbergii*) and wild roses; and iv) the Cactus & Succulent Greenhouse, home to one of the world’s largest collections of Chihuahuan Desert cacti and succulents.

On display in the Greenhouse, a visitor finds nearly 165 species and varieties, which produce an impressive color palette during the spring blooming season. We’re fortunate to display cold-tolerant heat-sensitive plants from the higher elevations of the Chihuahuan

Desert (reaching 10,000 feet or more in Mexico, where about 2/3rds of the Chihuahuan Desert biome is located), as well as lower elevation plants, which are well-adapted to high temperatures but sensitive to cold, potentially freezing desert nights. CDRI uses heaters, ventilation and fans to manage the Greenhouse temperatures year round, contributing meaningfully to the diversity and beauty of the specimens on display.

The attached site map from our Botanical Gardens guide brochure provides you with a sense of the 18+ acre portion of the total 507 acre site, calling attention to the 10 foot tall “game fence” defining the perimeter, without which the maintenance of the gardens and the preservation of the living collection would be largely impossible. Our site is populated with numerous herbivores, who would view an unprotected garden as a hungry human would view a fully stocked, but unlocked Luby’s Cafeteria.



It’s worth noting the rather creative Botanical Garden site plan. Beyond a somewhat common and certainly logical grouping of related plant families, the natural elevation change of the Garden (highest to the NE, declining to the SW) is also utilized in regards to the arrangement of plant exhibits, from plant clusters that normally exist at higher elevations, to the plant clusters near the Garden’s main gate of plants that are more compatible with hot, more arid desert conditions. An additional noteworthy point is the “pesticide free” aspect of the Gardens. For rodent control in the Cactus & Succulent Greenhouse we use physical traps (including live traps) and we use Balsam Oil packets, which emit an odor that helps repel the smaller mammals.

The next three pictures are from the Cactus & Succulent Greenhouse.



*Echinocereus enneacanthus* (with an *Echeveria*)  
Photo credit: CDRI



Cactus & Succulent Greenhouse  
Photo credit: CDRI

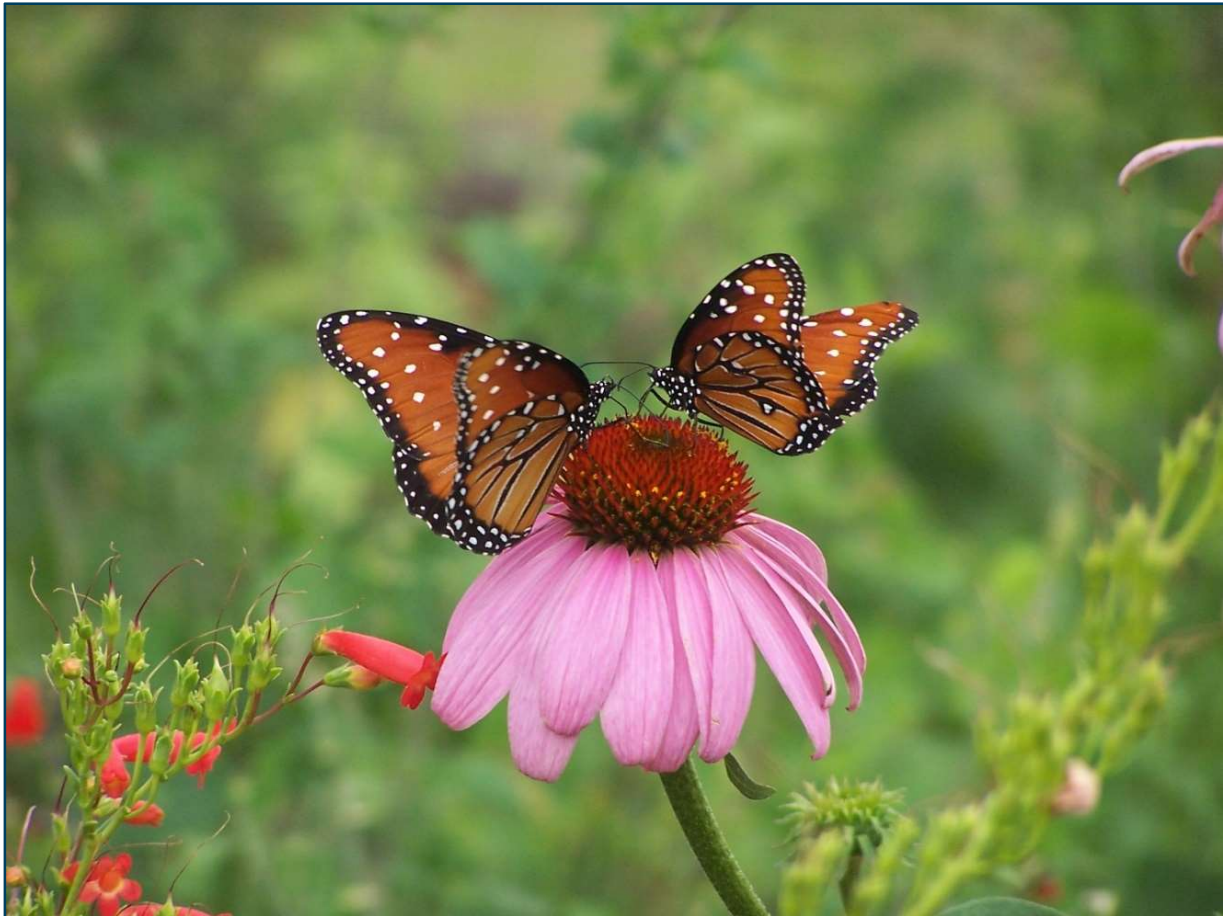


*Echinocereus coccineus*. Photo Credit: CDRI



The Gardens, which include over 450 labelled specimens, contain representative plants from the following families: Ocotillo; Agave; Beech (oaks, hackberry buckthorn and Tracy hawthorn trees); Acanthus; Catalpa; Rose; Sumac; Legume; Cypress and Pine; Olive; Heath (including Texas madrone); Mint; Verbena; and Figwort. We are fortunate that our entire 507 acre site is generously covered in predominantly native grasses, mostly all of which are in the genus ***Bouteloua***. The grasses exhibit described in the next paragraph will add a welcomed addition of catalogued and labelled specimens.

**This final picture is from the Pollinator Garden section of the Botanical Gardens.**



**A Queen Butterfly Visits a Cone Flower in the Botanical Gardens. Photo credit: CDRI**

A nearly perfect setting such as the Botanical Gardens is often best left alone, unless any changes naturally integrate and serve to enhance the already wonderful visitor experience. We're pleased to announce that just such an addition exists, and that this new section, devoted to native grasses, is underway and expected to fully develop during the next year or two. CDRI's exhibit advisor is none other than Dr. A. Michael Powell, a CDRI co-founder. Dr. Powell's (or Mike as he insists being called) humility would never allow him to make the claim, but in his case, he literally "wrote the book," on the subject; *Grasses of the Trans-Pecos and Adjacent Areas*, published in 2000 by Iron Mountain Press. We sell this book, along with many others, in the gift shop. It is beautifully illustrated by Dr. Powell's colleague and long-time CDRI supporter, Patricia R. Manning.

CDRI's emphasis on plants is not to the exclusion of site features focused on geology, biology, and anthropology, but it is safe to say, our Nature Center and Botanical Gardens are designed and operated in harmony with and in furtherance of our mission to "promote awareness, appreciation and concern for nature generally, and the Chihuahuan Desert region specifically, through the visitor experience, education, and the support of research." Moreover, the Gardens and the companion brochure promise to delight plant lovers, regardless of their individual locale and plant familiarity.

We hope you'll come experience the Nature Center soon. Better yet, bring a group and pre-arrange a Garden Tour or guided trail hike. We're here as stewards and committed to making your visit memorable.

**The Texas Society for Ecological Restoration (TXSER) connects scientists, practitioners, and policy-makers to restore Texas ecosystems and the vital services they provide.**

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