Regardless of how many times I experience it, one thing that still amazes me every year is the temperature differential between the winter and the summer seasons of the Rio Grande Valley. One day I am freezing to death in “miracle snow”; six months later I am baking to death in blistering heat. I must be a non-native critter, just like too many a non-native plant sitting in the Valley’s urban and suburban landscape. But I can seek - and find - refuge from the natural elements, and, happily for me, life goes on. Most non-native these plants are not so lucky.

Just like me, non-native plants are used to growing conditions different to those found here. In order for exotic plants to survive, the south Texas home or business landscaper must alter the local growing conditions to suit their needs. The inevitable consequence of this action is the typical high-maintenance, conventional landscape.

Native plants, on the other hand, are those indigenous to an ecoregion, and are therefore adapted to the regional soil and weather conditions. The benefits of using native plants in planned landscapes include amongst many others: water conservation, reduced exhaust pollution and use of chemicals, reduced time and cost of maintenance, and increased wildlife habitat.

If one of the goals of the native plant landscape is to attract wildlife, hardly anything works better than adding a clean, reliable source of water. Even in the best native plant garden, visitation by both resident and migratory song birds and butterflies can be increased dramatically just by adding a simple water feature.
Water can be provided in a variety of ways. Ponds, shallow pools, bird baths, ceramic trays, or plastic saucers work well to provide a constant, clean water supply. It is very important that every type of water supply be permanent, shallow around the edges, and have gently sloping sides.

A quick survey around my and the adjacent neighborhoods quickly revealed that my front yard is the only one featuring a wildlife water feature of any kind. Chances are the same is true in the area where you live. Water availability is essential throughout the year, but especially during the hot, steamy summer. Therefore it is critical that resident and migratory wildlife have as many sources of readily available water as possible.

Here is some basic information on simple ways you can provide water for wildlife.

**Bird baths:** This water source can be as simple as a plastic plant saucer or as elaborate as a fancy concrete bird bath. Bird baths can be located at ground level or elevated. It is important to keep them full at all times to offset water lost through evaporation. This regular maintenance is especially important during this time of the year.

If the bird bath has a deep bowl, put a flat rock in it to give birds better access to the water and enable them to easily judge the water depth. Portland cement can also be used to make a bowl shallower. Bowls that are 1-1.5 inches deep work best. Placing the bird bath under the partial shade of a large shrub or tree helps keep the water cool. Also, overhanging or close-by branches provide a quick escape route to bathing birds when needed. To reduce hiding spots from lurking predators remove tall vegetation around the edges or base of the bird bath. Whenever possible, place bird baths near windows for viewing.

**Water drippers/misters:** Moving, bubbling, or spraying water attracts even more wildlife. When placed directly above a bird bath the inviting splashing action of both water drippers and water misters is really alluring to birds. Really easy and simple to install, these little devices are also very inexpensive; basically all that is needed is the dripper itself, a few feet of 0.25-inch diameter plastic microtubing, and a water faucet-microtubing adapter. Thread the dripper on one end of the microtube and the adapter on the other end, hook it up to your water faucet, run it along a high branch, and you are ready to go. A water mister is just as easy to install.

To conserve water turn the faucet on in the morning and off at the end of the day, or, for added convenience use a timer. The birds will really appreciate and enjoy the miniature “water park”. As a bonus, the moving water will prevent mosquitoes from using the bird bath as a breeding pool.

**Ponds:** Construction of a pond can be more elaborate but can be done if you get some help or equipment. Depending on the soil type you may need to line the hole with lining material to make sure the pond holds water. Every pond should have gently sloping sides, shallow ledges, or depressions where puddles form around the edge. Wildlife will drink and bathe in these puddles. Depth and sharp drop-off edges are the main reasons swimming pools are pretty much useless as a wildlife water source. The best water depth for wildlife is 1-3 inches.

**Butterfly puddles:** Butterflies receive water from the nectar they sip. But they also obtain salts and minerals from moist soil. If moist spots are not available in your garden you can create them by spraying water on a dirt or gravel path.

And do not forget regular maintenance: keep your water source full of clean, fresh water at all times. The last thing you want to do is turn your wildlife water source into a source of wildlife disease or disappointment.

After you put up your wildlife water source you can enjoy it too! Grab your binoculars and enjoy great looks of the resident and migratory wildlife that has made our Valley famous worldwide. Have a great day!

Jesús Franco, is a Urban Wildlife Biologist with Texas Parks & Wildlife located in The Rio Grande Valley, Texas.
Transformation of a Landscape: The First Year

by Chris Hathcock

June 2005 marked the first year since completion of the initial landscape plantings, excluding the grass/wildflower seeding, around the new headquarters building at Bentsen – Rio Grande Valley State Park/World Birding Center in Mission. This project covered nine acres and incorporated 80 species and over 7,600 plants, of which 3,459 were trees and shrubs and 4,179 were sub-shrubs and herbs. To my knowledge, this is the largest landscaping project ever undertaken using almost exclusively plant species indigenous to the lower Rio Grande delta region.

Much has changed since the first plants were put in the ground in early 2004. The addition of the first trees in January alone, 50 balled-and-burlapped sabal palms with 4 to 6-foot-tall trunks, had a dramatic effect on the otherwise vegetatively barren construction site, an agricultural field 3 years prior. The landscape steadily developed and increased in attractiveness over subsequent months. By the end of February, over two hundred 5 to 20-gallon-sized shade trees of 8 species – predominantly cedar elm, Texas ebony, and anacua – had been planted, and buffalograss sod had been laid in the events court. From March to June, landscapers spread a 2 to 3-inch layer of fine-grained hardwood mulch over roughly two acres between and around the three buildings, and finalized initial plantings of all bedding and pond plants, including 43 species of small trees and shrubs, 12 species of sub-shrubs, upland herbs and ground covers, and 8 species of aquatic and moist-soil herbs. Finally, the northern three-quarter-acre perimeter of the landscape, which had been kept weedless for a year prior, was drill-seeded with a grass/wildflower seed mix in September. Most of the original vegetation from this first-phase project has flourished and grown, transforming the drab, lifeless, and flat bare-ground site to a lush, vibrant, and structurally complex natural setting.

With over three and a half acres of land slated for additional, albeit less formal landscaping, and certain areas among the initial plantings still lacking sufficient vegetation, mulching and planting has continued to the present. As of July 2005, over 900 gallon-pot sized plants representing 22 additional species have been added since completion of the first phase in September 2004. These newer plantings were distributed over one and a half acres, along with about 700 cubic yards of additional mulch, for the eventual establishment of the following: 1) two quarter-acre “bird gardens” using primarily woody species selected for their fast growth and fleshy-fruit production, 2) a quarter-acre expansion of a popular butterfly garden using numerous representatives of native mistflower (Eupatorium sp.), 3) a half-acre of low manzanita-dominated shrub garden, and 4) a quarter-acre of tree line.
A major long-term goal of this project is convergence of the extended landscape with the nearby 15-acre woodland-restoration field to the north of the site, on which 2,400 tree and shrub seedlings were planted in January 2005. There remain over three acres of landscaping needed to fill this gap. Therefore, visits to these gardens will likely continue to yield fresh views of a landscape in transformation.

Figure 1. Large pond area on April 29, 2004 (above) compared to July 1, 2005 (below). Note the magnificent blooms of the Texas lantana, in the foreground, which has been this summer’s “stand-out” species.
Figure 2. North of new office building on April 29, 2004 (above) compared to June 30, 2005 (below). Note buffalograss (texoka variety)/wildflower seeded area in foreground outside of mulch. The buffalograss is slowly filling in over the bare ground, and is currently at about 30% of its anticipated coverage. Spring and summer 2005 blooms in the seeded area included Texas bluebonnets, Indian blanket, winecup, prairie verbena, orange zexmenia, horsemint, scarlet sage, *Coreopsis* sp., betony leaf mistflower, and mealy sage (exotic to the region).

Chris Hathcock is a Board Member of the Native Plant Project and Habitat Restoration Coordinator for three state parks in the area, including Bentsen-Rio Grande Valley.
Native Plant Rescue: The Valley Nature Center will rescue native plants about to be destroyed by construction companies, developers, or no longer wanted by home owners. Call 956-969-2475.

Exclusively Native plant sources:
Benito Trevino, Landscaper/Grower, Rio Grande City 487-4626
Valley Nature Center – Native Plants, Weslaco 969-2475
Mother Nature’s Creations, Harlingen 428-4897
Heep’s Nursery, Harlingen 956-457-6834

Nature Happenings in the Lower Rio Grande Valley, Texas

MISSION BUTTERFLY FESTIVAL – 2005
The Mission, Texas Chamber of Commerce is having its seventh annual butterfly festival October 20-23, 2005. For a listing of events and registration information call 1-800-580-2700, or visit the Mission Chamber of Commerce, 220 East Ninth Street, Mission, Texas

WILD IN WILLACY, Raymondville – 2005
The Raymondville & Port Mansfield, Willacy County, Texas Chambers of Commerce are having their annual nature festival entitled “Boot Fest” October 28-29, 2005. For a listing of events and registration information call 1-888-603-6994, or visit the Raymondville Historical & Community Center, 427 South Seventh Street, Raymondville, Texas.

RIO GRANDE VALLEY, BIRDING FESTIVAL, Harlingen – 2005
The Harlingen, Texas Chamber of Commerce is having its ninth annual Birding/Nature festival November 9-13, 2005. For a listing of events and registration information call 1-800-531-7346, or visit the Harlingen Chamber of Commerce, 311 East Tyler, Harlingen, Texas.

Texas State Park Tours/ World Birding Center, Mission, Texas— Lomitas Ranch Tours and other natural area tours 7:30 a.m. – 5 p.m. every Tuesday and Friday from Benson Rio Grande State Park/World Birding Center in Mission, TX. Outings focus on native plants and their uses. Fees: $25 per person: reservations required - call 956-519-6448. Or go to www.worldbirdingcenter.org

Sabal Palm Grove Sanctuary— Native plant presentation and tour by Joseph Krause – every weekday at 10 a.m. Pre-registration required – call 956-541-8034.

Laguna Atascosa NWR— Nature BIKE RIDES on Saturdays from 8 a.m. - 10:30 a.m. and Nature WALKS, Sundays from 8 a.m. - 10 a.m. Call for details: 956-748-3607.

Santa Ana NWR— Tram Tours of the park. Fees: $3 for adults and $1 for 12 years-old and under. Guided Nature WALKS are available. Call for details: 956-787-3079.
The Sabal is the Newsletter of the Native Plant Project and conveys information on the native habitats, and environment of the Lower Rio Grande Valley Texas. Co-editors: Gene Lester and Eleanor Mosimann. **You are invited to submit articles for The Sabal.** They can be brief or long. Articles may be edited for length and clarity. Black and white line drawings -- and colored photos or drawings -- with or without accompanying text are encouraged. We will acknowledge all submissions. Please send them, preferable in electronic form - either Word or WordPerfect, to: Native Plant Project, P.O. Box 2742, San Juan, TX 78589 or contact Gene Lester @ 956-425-4005, or g_lester48@msn.com. See The Sabal and our 4 handbooks on the website: www.nativeplantproject.org

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**Native Plant Project Annual Membership Application Form**

____ Regular $15 per year  ____ Contributing $35 per year  ____ Lifelong $250 one time fee per individual. Members are advised of meetings, field trips, and other activities through The Sabal. Dues are paid on a calendar year basis. Send checks to Native Plant Project, P.O. Box 2742, San Juan, Texas 78589.

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Comments/ suggestions/ speaker recommendations should be sent to: Native Plant Project, P.O. Box 2742, San Juan, TX 78589 or contact G. Lester @ 956-425-4005 or g_lester48@msn.com
Native Plant Project Meetings – September 27, 2005. **Board meeting** at 6:30 pm; **General meeting** at 7:30pm featuring: Jim Everitt who will give a program on native cacti of the Rio Grande Valley.

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Native Plant Project
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