

Honey Mesquite

Prosopis glandulosa
Fabaceae – the Pea Family

Not as common at the Rio Bosque as their cousins the screwbean mesquites, honey mesquites can be recognized by the larger leaflets of their compound leaves, and the long (5-6 inch), straight to slightly curved mottled seed pods.

Mesquites were an important food source for native peoples of the Southwest. Rich in protein, sugars and minerals, green pods were boiled to produce a nutritious syrup, and mature pods were ground into meal (“pinole”). Pods harvested in the fall could be stored through the winter. Many other desert dwellers, including rodents, jackrabbits and quail, dine on mesquite seeds.

Saltcedar Tamarisk

Tamarix spp.
Tamaricaceae – the Tamarisk Family

In many southwestern river systems where dams have changed historic flooding regimes, new conditions have highly favored the invasion of former riparian areas by exotic saltcedars. Growing in dense stands, these trees out-compete native species and are difficult to remove once established.

Saltcedars have dark green, feathery leaves, white to pink flowers in spring, and grow to 25 feet high. When the wetland cells at the Rio Bosque were constructed in 1997, much saltcedar was removed. Some mature stands were allowed to remain because they provide valuable nesting habitat for birds like Harris’s Hawks, Yellow-breasted Chats and Painted Buntings. As native vegetation is re-established at the park, the saltcedar stands will gradually be taken out and converted to tornillo-honey mesquite associations.

Above: Honey Mesquite branch with seed pods

Below: Saltcedar branch

Mistletoes

You may notice a clump of different-looking leaves in the canopy of a cottonwood or mesquite, or a patch of green in otherwise bare branches during the winter. That’s mistletoe (*Phoradendron spp.*), a parasitic plant that taps into its host to extract food and water. Besides adding greenery to Christmastime festivities, mistletoe serves as an important food source for many animals. Phainopeplas, for example, relish mistletoe berries. The seeds pass unharmed through a bird’s gut and are deposited with its droppings on a new host tree – a very successful dispersal strategy.

Cover: Tornillo branch with mature seed pods
Below: Different stages of Tornillo flower bloom and initial seed formation

Wetlands and riverside forests once graced the banks of the Rio Grande in the Paso del Norte region. They were the area’s most productive natural habitats, but today they are virtually gone. At Rio Bosque Wetlands Park, the environment is still changing, but in a new way. Here, a diverse partnership is working to bring back meaningful examples of the unique and valuable ecosystems once found in our river valley.

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TREES

of the Rio Bosque

Rio Bosque
Wetlands
Park

El Paso, Texas



“Lines of cottonwood and willow mark the shifting courses of the river.... The river flats are occupied by dense patches of arrowwood, flanked by the tornillo or screwbean and mesquite.”

Edgar Alexander Mearns, member of the United States-Mexican International Boundary Survey team, describing the El Paso Valley in 1907.



Branch of a Rio Grande Cottonwood



Rio Grande Cottonwood

Populus deltoides subsp. wislizenii
Salicaceae – the Willow Family

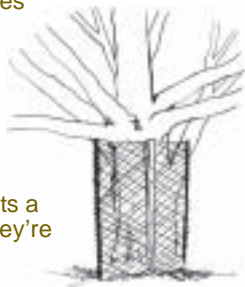
Cottonwoods once lined the Rio Grande, shading its banks with thick foliage and hosting a diversity of insects, mammals and birds. Every spring as melting mountain snows flooded the river, the trees released millions of cottony seeds. Those that landed on damp soil germinated and quickly grew roots to follow the receding water table – cottonwood roots can grow as fast as ½ inch per day!

Throughout their life, cottonwoods require a stable, plentiful water supply. Human manipulation of the Rio Grande’s natural flow has created conditions highly unfavorable to the establishment and survival of cottonwoods, so very few are found in the valley today.

As habitat restoration progresses, cottonwoods will be the largest trees at the Rio Bosque, reaching up to 80 feet in height. Currently, a few mature cottonwoods are found on the park’s eastern and southern borders, and many smaller plantings are located along the sides of the park’s main water channel. You can recognize them by their large triangular leaves sharply pointed at the apex.

Why are those trees in cages?

Many cottonwoods and Goodding willows at the Rio Bosque have metal cages encircling their trunks. Cages have been installed to discourage the park’s beaver from killing the trees. These large rodents love to eat the bark and shoots of cottonwoods and willows, so we give the plants a little extra protection until they’re big enough to fend for themselves.



Left: Goodding Willow leaves
Below: Coyote Willow leaves



Goodding Willow

Salix gooddingii

Salicaceae – the Willow Family

Coyote Willow

Salix exigua

Willows also graced the river banks and shared the cottonwoods’ requirements for abundant water. Wildlife and livestock ate the bark, seedlings and new growth of saplings; beavers built dams with the branches. Native Americans and early settlers used willow shoots and bark to make baskets and fish traps, and the wood for fence posts, shelters and firewood.

The two kinds of willow at the Rio Bosque are easily distinguished. Goodding willows take the form of a typical tree; their slightly broader leaves hang downward. Coyote willows grow more shrub-like and their narrow leaves generally point upward. You’ll find both along the edges of the main channel and the banks of the wetland cells.



Tornillo / Screwbean Mesquite

Prosopis pubescens
Fabaceae – the Pea Family

Its tightly coiled seed pod gives the tornillo (Spanish for “screw”) its name. In late spring and early summer, dangling columns of yellow flowers give rise to tiny green “screws” that mature to hard brown seed pods 2-3 inches long.

The foliage, dense thorns and nutritious pods of tornillos provide excellent habitat for wildlife. Birds like Verdins, Black-chinned Hummingbirds and Mockingbirds use the trees for perching and nesting. Wasps hang their nests and spiders string their webs from the branches. Insects and rodents eat the seeds, and many animals like jackrabbits and quail find cover in the shade of a tornillo. From small shrub-like saplings to spreading mature trees reaching 20 feet high and 30 feet wide, tornillos are found in the upland sections of the Rio Bosque.

