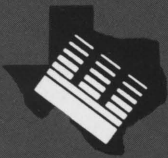


Landscaping With Native Plants To Promote Wildlife Habitat



Identification and Care
Of Selected Trees and Shrubs Important to Wildlife
In the Lower Rio Grande Valley of Texas

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Wildlife and Plants in the Lower Rio Grande Valley

At one time the Lower Rio Grande Valley provided a rich habitat for wildlife. Today much of that habitat has been replaced by some of the most intensively cultivated, agricultural land in the nation. Urban sprawl has also taken its toll. The subtropical habitat of the floodplain and the thorny scrub of the higher valley lands are largely gone. For many years the Santa Ana National Wildlife Refuge, a tract of just over 2,000 acres, has preserved the last remnants of native vegetation.

Beginning in 1980, various lands were acquired by federal, state and private entities to preserve some of the last remnants of thorny scrub vegetation and provide a refuge for native habitat along the river. This area is home to 145 unique animals, many of which are endangered, threatened or occur at the periphery of their range.

Propagating and replanting native species on former agricultural tracts prompted an interest by local citizens to use native plants on their lands. These native plants benefit wildlife and encourage sound land stewardship on private lands.

Over 1,000 different native plants grow in the South Texas area. Many have the potential for being used for revegetation in landscape settings. So varied are plants in growth habit, foliage and flower coloring, duration, soil and water requirements and aesthetic appeal that they can fulfill the needs of almost any landscape theme. Many have splendid horticultural qualities, which include: (1) attractive foliage, (2) symmetrical shape, (3) fragrant flowers and showy fruits, (4) cold hardiness, (5) resistance to diseases and insects, and (6) adaptability to local climates. The result is a trouble-free landscape requiring smaller amounts of pesticides, water and fertilizer, as well as less general upkeep compared to landscapes populated by exotics.

Plant species should be selected to meet long-range objectives. Is a shade tree needed? What value does it have for wildlife? Is it aesthetically pleasing? Various plant characteristics need to be considered, such as longevity, size, shape, sex, flowering habitat and care.

Fundamentals of Propagation Techniques

Some commercial nurseries market native plants for use in home gardens and landscapes. However, plants can be grown from either seeds or vegetative cuttings. Seed collection is often the most difficult part of propagation because harvesting seeds can be erratic and tedious. However, after good seeds are obtained, this method is similar to production methods for other exotics.

A seed is said to be dormant if any stage of germination is blocked. A hard seed coat is the most common external factor inhibiting germination, therefore, some species with hard seed coats must be "scarified" prior to sowing. Small seed lots may be nicked by a knife, filed or sanded by hand. Large quantities of seeds may be scarified in a mechanical tumbler or soaked in acid. Some species may also need a pretreatment of cold, moist conditions. This process is called stratification. After the seeds have been collected, cleaned, stored, and

if necessary, pretreated, the next step is to sow them in a good soil. Plant pretreated seeds outdoors as soon as all danger of frost is past.

Many plants may be successfully reproduced from stem or root cuttings. Stems can form new roots, and roots will develop new shoots. Also, many herbaceous plants are able to produce new roots from leaf-tip cuttings.

Once a plant has been propagated and has achieved an adequate size, it can be transplanted to the landscape.

Selected Species Important to Wildlife

Plants are important to wildlife for reasons such as food, escape cover, perches, nesting and denning, and shade. Birds and mammals may consume the seed, mast, leaves, and/or twigs for food. Trees and shrubs provide shade for animals, larger trees provide perch and nesting sites for birds and tree cavities provide den sites for mammals. The following tree and shrub species are suggested because of their importance to wildlife, aesthetics, availability and adaptability, as well as their ease of propagation, care and maintenance in the lower Rio Grande Valley.



LaComa, Saffron-plum *Bumelia* (*Bumelia celastrina*)

A spiny shrub or tree, this plant reaches up to 30 feet in height. The fragrant white flowers bloom throughout the summer into the fall. The purple to black fruits mature April through June. LaComa seeds can be dried with or without the pulp. Germination is difficult due to a hard seed coat and should be scarified and stratified for two to three months. LaComa can be rooted from softwood cuttings. Birds are very fond of the fruit and the tree is used for nesting.



Chapote, Texas Persimmon (*Diospyros taxana*)

This is an intricately branched, non-spiny shrub or tree that can grow to 40 feet. The bark is white, smooth and peels off in patchy strips to expose the white trunk. The fragrant flowers bloom from April to June and produce black fruit. Fresh, untreated seeds of Texas Persimmon will germinate promptly. It is difficult to root from stem or root cuttings. The persimmon is a preferred food of birds and deer as well as many other mammals.



Granjeno, Spiny Hackberry (*Celtis pallida*)

An evergreen shrub, attaining a height of 18 feet with numerous and spreading, spiny branches. The small yellow to orange fruit is edible and present from mid-summer until winter. Granjeno grows in a variety of soils. Seeds may be harvested and sown immediately. Granjeno can be started from cuttings using root sprouts, suckers and young plants. Many birds eat the fruit, as occasionally do deer, raccoons and rabbits. It is an excellent honey plant. Doves may nest in its branches. Granjeno is easily grown, long-lived and requires low maintenance.



Anacahuita, Wild Olive (*Cordia boissieri*)

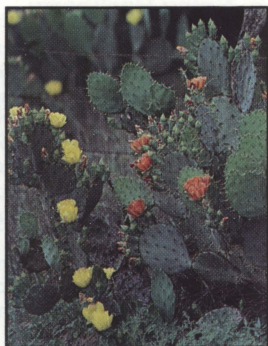
A small tree reaching 30 feet with a spreading, rounded canopy. The trunk is usually multi-stemmed and densely branched. The top surface of the large, light-green leaves is rough to the touch. The showy, white clusters of flowers are present from spring through summer. The large fruit matures from July to September. Anacahuita is easily propagated from seeds and cuttings. Germination is enhanced by the use of older seeds collected on the ground. Seeds may be planted in spring or fall. It may also be propagated from summer softwood or semi-hardwood cuttings. Anacahuita is a drought-tolerant species with low maintenance requirements. Some animals, particularly javelina, relish the fruit. Hummingbirds and bees are attracted to its flowers.



Huisache, Sweet Acacia (*Acacia smallii*)

A thorny shrub or small tree, huisache may be multi-stemmed or have a single trunk. It may be flat topped or have a rounded canopy with drooping branches. They are generally deciduous, but leaves may persist throughout the winter in the lower Rio Grande Valley. Huisache blooms from February to April with fragrant yellow flowers. The fruit is a pod containing many hard-coated seeds. Seeds should be collected in late summer when mature. Seed germination is enhanced by scarification. Plants do well on a variety of soils, since huisache is a durable, easily grown species. Bees use the pollen during the short blooming periods and birds may feed on the seeds. Deer will use the leaves, twigs and new growth for food.

Nopal, Prickly Pear Cactus (*Opuntia lindheimeri*)



Prickly pear is characterized by large, spiny, pear-shaped, flattened, fleshy pads. Prickly pear blooms in late spring or early summer with yellow, orange or red blossoms. The fruits ripen from July to September and contain numerous, small hard-coated seeds. Prickly pear is easily propagated by rooting the pads. Pads are placed either flat or vertically in the ground. Roots will develop from the pad. Care must be taken not to overwater because cactus will drown or become susceptible to fungal diseases. It requires a well-drained soil. Prickly pear is an important plant for wildlife. Numerous birds, insects and mammals (including humans) utilize the fruit and

pads as a food source. Quail, other ground birds and rodents use cactus as nesting and loafing cover. It is easily established and long-lived with few maintenance requirements.

Anacua, Sandpaper Tree (*Ehretia anacua*)



Anacua is a medium size tree of 30 feet but may reach a height of 50 feet. It has a rounded canopy and provides dense shade. The gray bark is deeply furrowed. The upper surface of the leaf is very rough. Flowering is from March to April, and occasionally in late summer after rain. The small, yellowish orange fruit develops in the late spring, summer or fall months. Plant propagation is by seed or cuttings. Ripe orange fruit should be collected in late summer. Softwood cuttings from the current season's growth may be rooted. This is a showy, drought-tolerant, ornamental plant. A variety of birds and mammals feed upon the fruit. Trees provide nesting sites for birds and cavities provide denning sites for mammals. It is an excellent honey plant.

Ebano, Texas Ebony (*Pithecellobium flexicaule*)



This is a medium to large size spiny evergreen tree, sometimes attaining a height of 40 feet. The crown is rounded and dense. The yellow-white showy flowers may bloom all year. The fruit is a 4- to 6-inch long pod and contains several hard beans. The seeds need to be scarified prior to sowing. Many species of birds use the dense canopy of the ebony tree for nesting, roosting and loafing. It is a good honey plant and an attractive shade tree. On good sites, especially in a landscape setting that is watered (even occasionally), this tree has the potential to grow to an impressive size.



Palo Blanco, Sugar Hackberry (*Celtis laevigata*)

A large, rounded crown, deciduous shade tree, the hackberry may reach 100 feet in height. The pale gray bark is covered with warty bumps. The orange-red to black fruit ripens in the early fall. Propagation is by seed or cuttings. Fruits should be collected in mid to late winter and planted for spring germination. It is also rooted from root sprouts or softwood cuttings. Birds relish the fruit and also use this tree for nests and perch sites. It is an excellent, fast-growing shade tree.



Olmos, Cedar Elm (*Ulmus crassifolia*)

A round-topped tree of 80 to 90 feet with spreading limbs and slender somewhat drooping branches. They are deciduous over most of their range but may be evergreen in the lower Valley. It is propagated from fresh, untreated seeds. Established cedar elms are tolerant of dry conditions. They make attractive landscape plants and grow moderately fast. They are excellent shade trees. Trunk cavities provide den sites for small mammals and the branches provide nest sites for birds.

**For more information contact:
Santa Ana National Wildlife Refuge (512) 787-7861**

A variety of reference books are available at your local bookstore or library. Also, plant materials are available at commercial nurseries and seed supply stores. A listing of contacts is available upon request. Photographs and drawings are furnished by the U.S. Fish and Wildlife Service and the authors.

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