



Hardy Headlines

Inside this issue:

Snags	2
Savanna	2
Wildflowers	2
Birds	3
Reptiles	3
Wildlife	3
History	4

Trees

Ashe Juniper: The Ashe Juniper is one of the dominant trees in the park—sometimes people call it “cedar”. It creates soil and is the nesting material for the Golden-cheeked Warbler, but it also blocks and sun and absorbs the first quarter inch of rain.

Persimmon: The persimmon is another dominant tree. Wildlife eat its fruit. Notice the smooth gray bark.

Kidneywood: Dogface butterfly larva eat the leaves of the Kidneywood and its bark was used to treat kidney diseases.



Special points of interest:

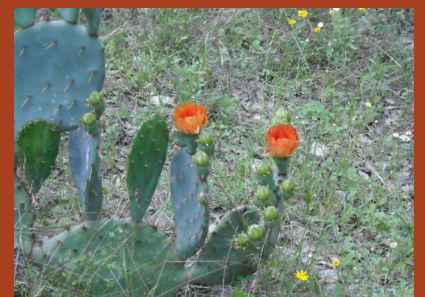
• Yucca Moths



Cactus

Prickly Pear: The Prickly Pear cactus has flat pads called platycades and hard spines and hairy spines called glochids. The fruit are called tuna and make a delicious jelly and the cochineal, white scale insects that live on the plant make a red dye.

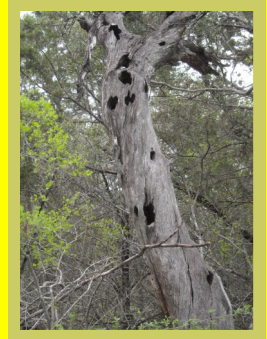
Tasajillo: The Tasajillo or Pencil Cactus is thin like a pencil, It is also called Christmas Cactus because it has bright red fruit.



Snags

What are snags? A snag is a dead standing tree. Primary cavity nesters like the woodpecker and secondary cavity nesters like the Carolina Chickadee use the snags to make nests. Small mammals and lizards also use snags as homes. When the tree eventually falls, lichen, fungi, toads, and salamanders use the snags as homes. The wood is recycled into nutrients for the soil. Many of the birds eat insects and help keep the insect populations in check.

Why do we leave dead tree standing?



Savanna Restoration

Why did the savanna disappear? Originally this land was 15-30% tree cover and the rest was grassland. Now it is 66-98% tree cover. A savanna is a grassland ecosystem with sparse scattered groups of trees. The savanna provides “natural services”, keeping the ecosystem healthy – retaining more water and reducing run-off, providing “edge habitat” – open space with adjacent tree cover – for species, providing food for a variety of butterflies and other insects, birds, and wildlife. Savannas foster a great diversity of species, which we call “biodiversity”. Originally bison which roamed and grazed, and natural occurrence of fire kept the savanna balanced by periodically removing woody plants and keeping grass alive. Fenced cattle ate the grass to the roots and controlling fire allowed woody plants to outcompete the grass and dominate the land. The Ashe Juniper and other trees created an almost total tree cover under which grass and small plants could not survive.

What do we gain by savanna restoration?



Wildflowers

What are some of the wildflowers of the park? Throughout the year beautiful wildflowers may be seen in the park: PrairieVerbena, Gaillardia, Blue Curls, Woolly-white, Mealy Blue Sage, Golden Wave, Clasping Coneflower, Horsemint, Velvet Mallow, Two Leaved and Lindheimer's Senna, Bladderpod and Greenthread. Wildflowers help with erosion control. They provide nectar and food for butterflies and humans. They are used for dyes, insecticides and medicines. Three ecoregions – Blackland Prairie, Edwards Plateau, and south Texas Plains come together in the park forming an “ecotone” – an area of two or more ecosystems. Ecotones provide maximum biodiversity.



Birds

What are some common birds in the park? You can see birds flying overhead – Turkey vultures, Black Vultures and Northern Caracaras. White-winged doves and Great-tailed Grackles fly by.

Other birds, such as Cedar Waxwings, perch in trees. Northern Cardinals, Carolina Chickadees, Black-crested Titmice, Carolina Wrens, Berwick's Wrens, and Lesser Goldfinches, visit the park. The endangered Golden-cheeked Warbler has been observed. Golden-fronted Woodpeckers and Ladder-backed Woodpeckers can be heard. The many seeds and insects of the savanna attract a variety of sparrows. Roadrunners can be seen on the ground.

What do the birds add to the park?



Reptiles

What are some common reptiles in the park? Reptiles are vertebrates with a backbone, that are terrestrial, that is, live on land, and have scales or plates on their bodies. Snakes, lizards and turtles have been seen in the park. Reptiles are exothermic, which means they regulate their temperature from the environment. This adaptation allows them to conserve energy. They can heat up by sitting in the sun, or cool down by finding some shade. The Rosebelly Lizard, Texas Spiny Lizard, Ground Skink, Texas Rat Snake, Rough Earth Snake, and Checkered Garter Snake are seen in the park. Reptiles use camouflage, resembling the background they inhabit, or changing color to match the background. Many lizards eat insects. Most snakes are not harmful, but it may be hard to see them in groundcover, so always watch where you step.

How does camouflage help reptiles?



Wildlife

What ecosystems do we find in the park? Different animals inhabit different ecosystems. Rock squirrels prefer the wetter, cooler riparian – vegetation along a river or creek – ecosystem by Salado Creek. Ringtails are nocturnal, preferring to be active at night. Cotton-tail rabbits and white-tailed deer, can be seen at sunrise and sunset. Raccoons, coyotes and foxes use the creek bed as a wildlife corridor.

What kinds of animals live in the different ecosystems?



Phil Hardberger Park Conservancy

Alamo Area Master Naturalists

Educate, renew,
recreate

Moth image copied from *desertusa.com/animals/coevolution-mutualism.html* ,
squirrel image TPWD, filed
sparrow courtesy of Lora
Render, savanna courtesy of
Barbara Schmidt

The special relationship of the yucca and yucca moth: The yucca moth is attracted to the flowers of the twisted-leaf yucca. The Moths mate in the flower and lay their eggs there. As they move on to another flower they pollinate the yucca. The moth needs the yucca to reproduce. The yucca needs the moth to be pollinated. We call this "obligate mutualism", when two species need each other to survive, and both species benefit.



History

Early Humans

How long ago did humans live in this area? Early humans hunted mastodons and mammoths with spears and darts 12,000 years ago, as they roamed hunting and gathering plants. Three thousand years ago groups settled, and 1200 years ago ceramic pots for cooking and the bow and arrow began to be used. This area was a good source of "chert" used to make tools. Remains of camping sites using chert are found in neighboring parks. The creeks and rivers were used by Spaniards, Lipan Apache, Comanche and Tonkawa Native Americans, for transportation and agriculture.

The Voelcker Dairy Farm

How was the land on which the park used in the last two hundred years? The Voelcker family had a dairy farm on the land on which the park is built. They sold milk to the large dairies. When dairy farming became too competitive they raised cattle. When Minnie Voelcker died, the City of San Antonio bought the land to create Voelcker Park, later renamed Phil Hardberger Park in honor of Mayor Phil Hardberger and his dedication to the park. (Image courtesy of Dudley Harris <http://blog.my-sanantonio.com/jeffcoyle.2011/03.volunteers-to-restore-historic-dairy-barn-at-phil-hardberger-park/>)

