BASTROP SPRINGS

Bastrop Springs are located in the River Walk Park in Bastrop, Texas. The main spring is located at the foot of *Pine Street* behind City Hall. Just park and walk down the stairs to see Bastrop Springs. "Bastrop Springs, at the foot of *Pine Street* in Bastrop also flow from terrace gravels at 0.31 liter per second. The Old Camino Real or King's Highway, which was hacked out of the wilderness soon after Teran's exploration, crossed the river at these springs. Many very early travelers must have made a refreshing stop here. When Stephen F. Austin's colony settled at Bastrop (then called Mina) in about 1827, the springs were the chief source of water."

Bastrop Springs at the foot of the stairs leading into the park (right) and near the river where a PVC pipe empties into the river.

Excerpts from Springs of Texas by Gunnar M. Brune

Unfortunately, the story of Texas springs is largely a story of the past. Many are already gone. It is urgent that data on past and present springs be recorded. In the not very distant future most of Texas springs will exist only in a legend of a glorious past when mankind was one with, and reveled in, nature," Gunnar M. Brune wrote in the "Purpose and Scope" portion of his book, Springs of Texas, Volume1, published in 1981. It was reprinted by Texas A&M, College Station in 2002 under the direction of Helen C. Besse. Brune died in 1995. He was educated at Antioch College and Massachusetts State University receiving a bachelor's degree in geology. He spent 33 years with the U.S. Soil Conservation Service. He also worked seven years for the Texas Water Development Board conducting and reviewing a number of groundwater studies. He spent ten years writing this book which covers 183 counties. Bastrop County was one of them. Springs of Texas is available in the Bastrop Public Library. Many of the springs may be visited on foot or by canoe.

"Many of the springs found and used by the Spaniards along the Colorado River still exist, as they are in low situations where the potentiometer surface of the groundwater is still above the ground surface.

In some parts of the county, however, most of the springs have failed, because groundwater levels have been lowered as much as 30 meters by well pumping. For example, the springs two kilometers north of String Prairie in southern Bastrop County are now dry. They once were a chief source of water for the community. The county's springs issue chiefly from Quaternary terrace sand and gravel deposits along the Colorado River and from Tertiary Eocene sands such as the Wilcox, Carrizo, Reklaw and Cook Mountain. The Tertiary formations dip southeast at about 25 meters per kilometer. Displacements by faulting control the location of some springs.

Spring water in the county is generally fresh, of the calcium and sodium bicarbonate type, and hard. Flouride content is usually less than desirable, and the iron content may be very high. Most of the field studies were made during the period September 24-29, 1975."

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From Springs of Texas, Volume 1, by Gunnar Brune, 1981. 2nd Edition, Texas A&M University Press, College Station, 2002

Flora and Fauna of Texas Springs

Protohistoric Flora and Fauna

"When history dawned on Texas some 500 years ago, the abundance and size of plants and animals which depended upon spring waters was astounding by today's standards. Some hollow sycamore trees could hold 30 men. Some were lived in until a cabin could be built.

"Grapevines one meter in circumference were not uncommon. Hugh grizzly bears roamed the woods, and man-eating alligators were a constant danger in the streams and rivers. Eighteen kilogram turkeys, 50-kilogram catfish, and crawfish measuring 20 centimeters were the rule. The sky was dark during migrations of passenger pigeons.

"At the time, most springs were surrounded by bogs and ponds which beavers helped to maintain. In shallow low running water, plants such as water cress, pennywort, and cypress trees thrived. On the damp rocks surrounding springs and waterfalls, numerous ferns (especially maidenhair), mosses, and liverworts made their home."

"On the shores of pools were, and still are in some cases, cattails, bulrushes, spike rushes, sedges, bur reeds, water plantains, arrowheads, and grapevines, and willow, cottonwood, sycamore, sweetgum, and plum trees. In deeper water, rooted in the bottom but with floating leaves, were water lilies, pondweeds, and water shields.

Floating in the pools were water ferns, water hyacinths, water lettuce, duckweed, duckmeat, and water meal. Completely submerged plants in spring pools included milfoil, hornwort, naids, water worts and fanworts.

Bogs and seepy areas in east Texas contain much peat moss and are bordered by shrubs and trees such as yaupon, baygall bush, leatherwood, viburnium, holly, rhododendron, bay laurel, wax-myrtle, dogwood, and poison sumac. Here, brightly flowered herbs also thrive, including violets, grass of Parnassus, pitcher plants, grass pinks, ordhids, meadow beauties, and blue hearts.

The springs were, and still are in some cases, inhabited by a large community of small animals such as flatworms, amphipods, isopods, snails, crawfish, insects, salamanders, frogs, turtles and fish. Animals such as bears, raccoons, snakes and birds feasted on these aquatic animals.

Many of the small animals such as amphipods, crawfish and fish have developed troglobitic or subterrainean species. These are adapted to living in the dark in subterranean water passages, especially near limestone springs. They usually exhibit a white or translucent color, reflecting the absence of pigment, and the reduction or loss of eyes. Some are lightly endemic, being known only from a single spring or cave stream.

Large herbivorous animals such as deer, elk and bison came to the springs to drink and to eat the lush spring fed vegetation. Carnivores such as cougars and wolves waited for their prey at the springs.