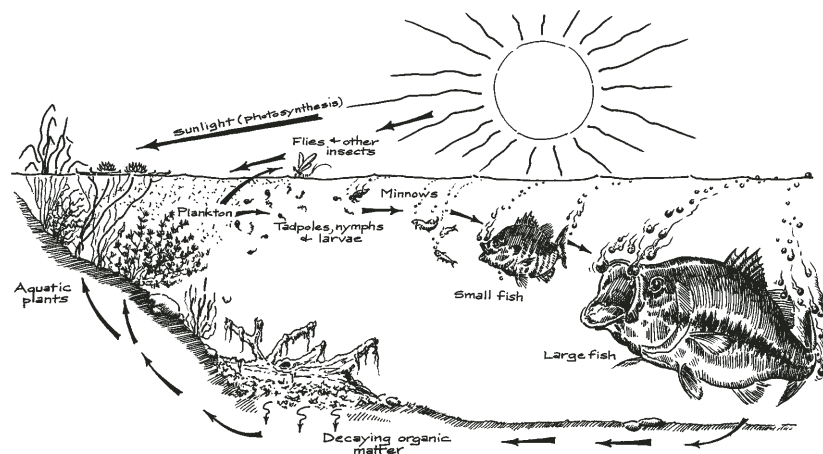


Additionally, healthy aquatic communities in Texas rivers, reservoirs and estuaries provide unparalleled recreational opportunities to millions of Texans.

Our fresh and saltwater environments vary from streams, to rivers, lakes and reservoirs, marshes, bays and the Gulf of Mexico. Each one provides unique habitats for a diversity of fish, bird, reptile, amphibian, crustacean and insect species.

Micro-organisms (tiny plants and animals) feed macro-invertebrates (like insect larvae) and small fish, which feed larger fish, birds, reptiles and amphibians. Of course, humans also play a role by eating fish and other aquatic organisms. When aquatic life dies and starts to decay, micro-organisms feed off the decaying material and the process starts over.

This is called the food chain.



Texas Farm Ponds

Farm ponds are common in Texas. They vary widely in size, water quality and the habitats they offer aquatic life. Most are less than an acre in size, but even these small ponds can be home to sport fish like largemouth bass, sunfish and catfish.

Good fishing requires good pond management. Careful stocking and proper harvest help maintain the balance of predatory fish and their prey. Control of aquatic plants keeps a balance between shelter and open water.

To receive a Texas Parks and Wildlife pond management packet, call (800) 792-1112, Ext. 4444. Or, for more information about farm ponds or private ponds, visit www.tpwd.state.tx.us/faq/landwater/fisheries/.



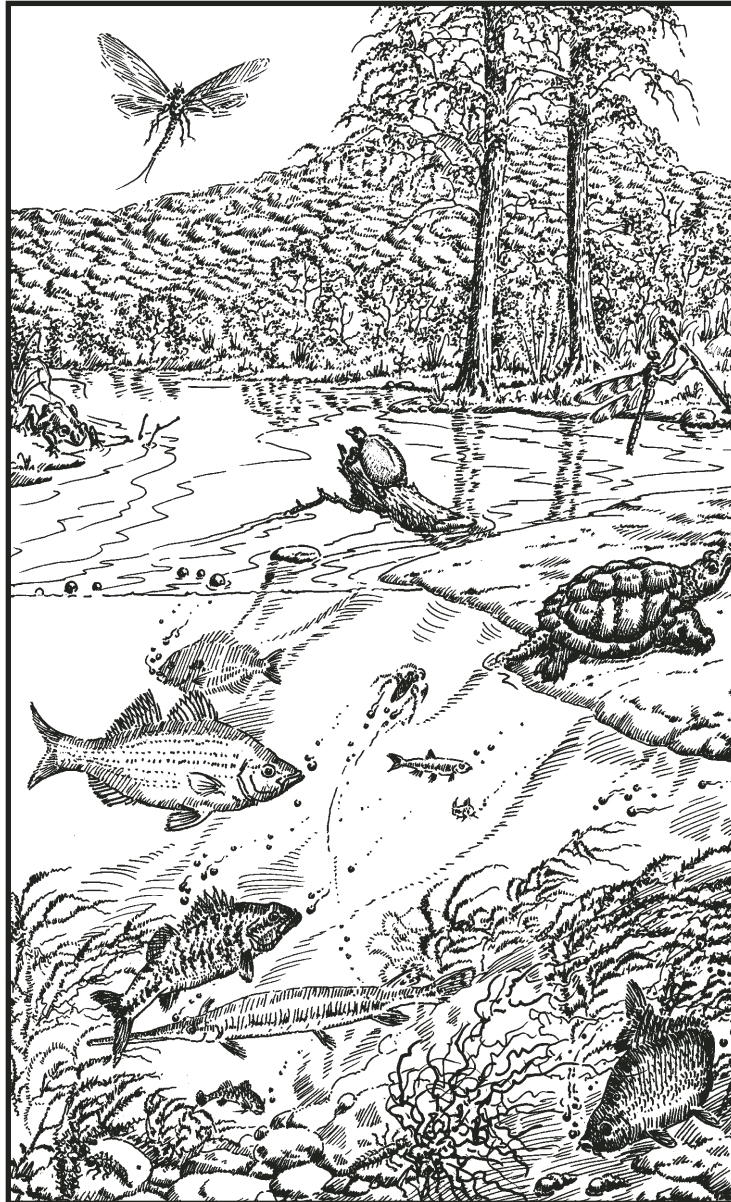
POND LIFE

Texas Hill Country Streams

Many of the streams that run swiftly through the rocky, tree-shaded hills of Central Texas are fed by springs. These streams are home to many species of fish, amphibians, plants and insects, which depend on a steady flow of clean water for survival. Some of these species (salamanders in particular) are found only in these special spring-fed environments. Our state fish, the Guadalupe bass, is found in several streams and rivers of Central Texas.

Hill Country streams provide good cover for fish with tree roots, branches and other vegetation along the edges and uneven, rocky bottoms. Insect larvae like to hide under rocks to catch bits of food in the current. These larvae, in turn, become food for fish. Many fish lay their eggs in the streams' shallow, gravelly riffles. Anglers can expect to catch bluegills, bass and catfish in the Hill Country on a variety of baits.

Hill Country streams have always been popular among people who love to fish, paddle, swim or watch nature. Many community groups have organized to help keep these streams clean, healthy, and flowing through wise water use and land use planning.



A TYPICAL HILL COUNTRY AQUATIC COMMUNITY

East Texas Streams

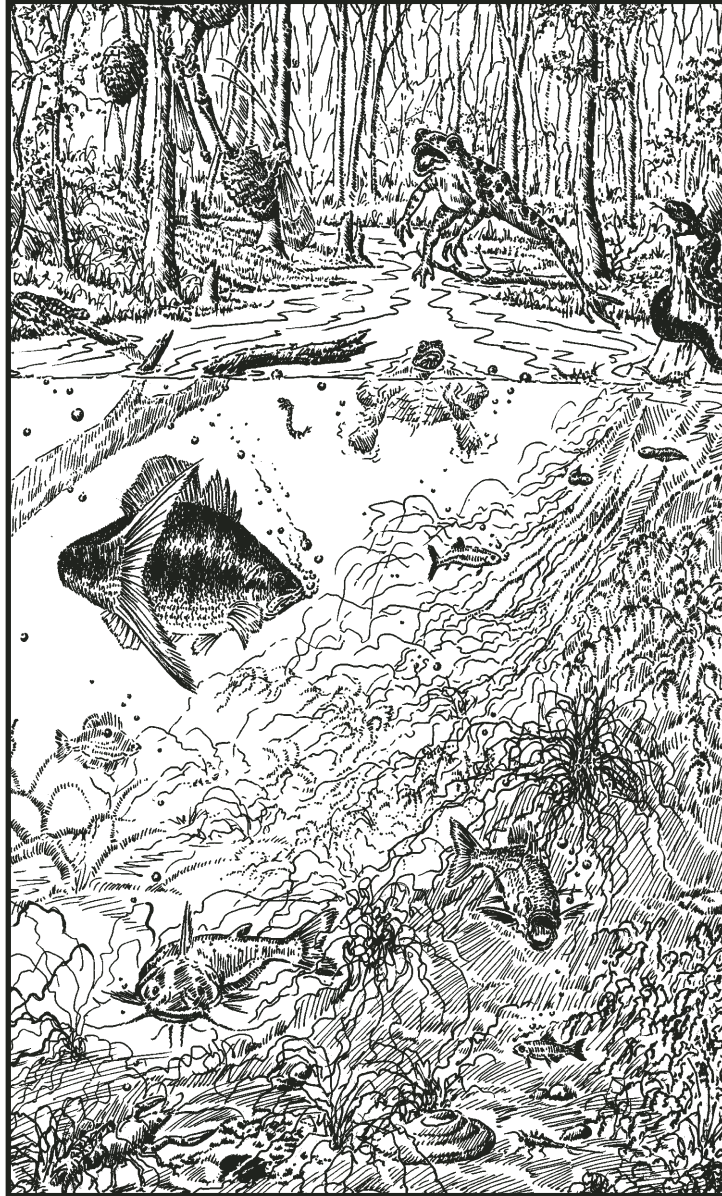
Streams wander between the hills and across the plains of East Texas, through banks lined with pines, hardwoods and brush. Leaf litter and muddy bottoms cause the water to be cloudy, but they also add vital nutrients, providing for a healthy ecosystem.

East Texas streams include a number of different habitats – riffles, runs, open water pools and sloughs, as well as oxbow lakes (remnants of streams cut off from the main channel). Seasonal flooding of nearby bottomlands provides yet another habitat for the catfish, sunfish, bass and other species that thrive there. Catfish are especially adapted to this environment and can be caught by fishing near the bottom using worms, stink-bait or shrimp.

West Texas Streams

West Texas streams are part of a very fragile ecosystem, dependent upon a scarce water supply, often fed by springs. As in other parts of the state, these streams provide a variety of habitats, from shallow, swift-flowing areas to deeper, slow-moving pools supporting a variety of fish, reptiles, amphibians, insects and mammals. Because water is scarce in West Texas, the riparian areas (banks of a river, stream or lake) team with wildlife.

Human activities can affect these streams in several ways. First, overuse of water from aquifers can lower the water table to the point that springs stop flowing and streams dry up. Second, groundwater can carry pollutants to these streams if care is not taken to contain or dispose of pollutants properly. Third, any action that destroys vegetation along stream banks or disturbs streambeds will reduce cover and food for fish. Some of the best fishing spots in West Texas streams are located just downstream from an undisturbed riffle, where the water begins to slow.



A FRESHWATER RIVER AQUATIC COMMUNITY

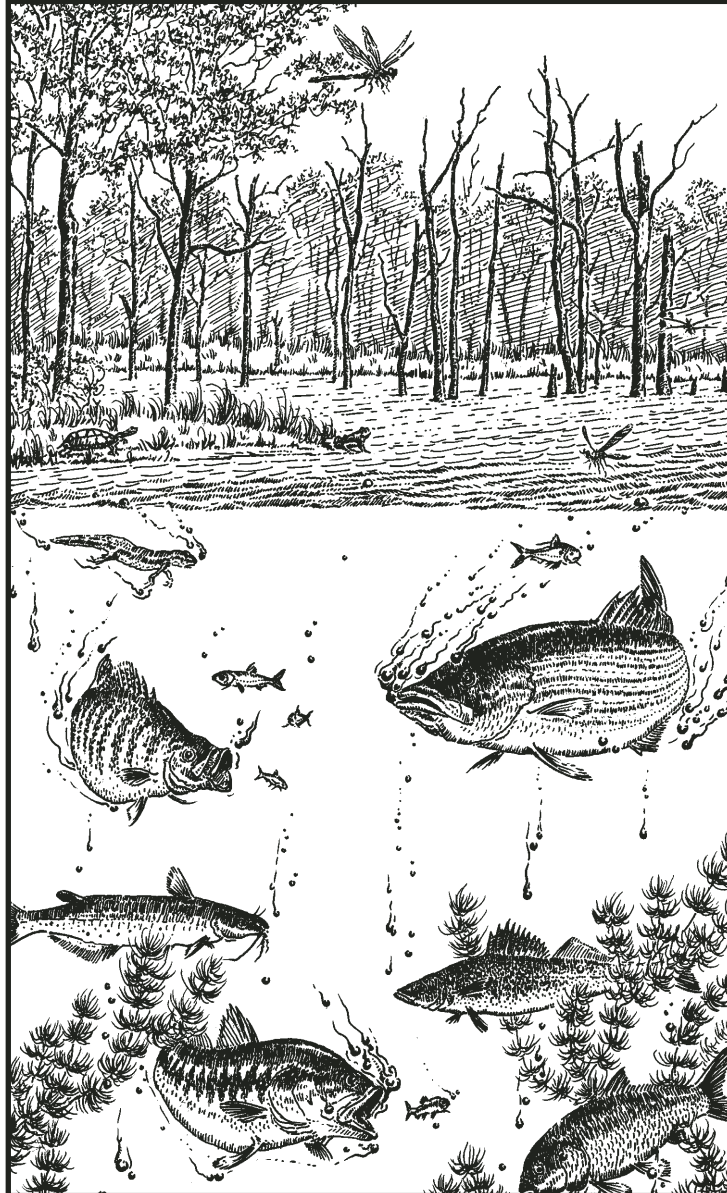
Reservoirs

Did you know that Texas has only one natural lake – Caddo Lake? All other lakes are “reservoirs,” made when streams or rivers are dammed for flood control, public water supply, agriculture and recreation.

Texas reservoirs vary in size, shape, depth and clarity across the state. In the west, they tend to be broad, flat, shallow and somewhat cloudy with sediments, their water level changing with amounts of rainfall. Central Texas reservoirs are often steep-sided and deep. These waters are relatively clear, depending upon amounts of storm water run-off. Water levels can fluctuate dramatically on some lakes during drought and flood events. East Texas reservoirs are shallow and relatively clear with a more constant water level.

Each reservoir’s combination of water, aquatic vegetation and substrate, or bottom, provides habitat for fish and other aquatic organisms. The fish draw anglers who support a statewide, multi-billion dollar sportfishing industry.

Many reservoirs are stocked with fish such as striped bass, largemouth bass, crappie and catfish. Anglers use a wide variety of tackle and fishing techniques. Check with local marinas and bait shops for current fishing forecasts and tips. You can also check the weekly fishing reports on the Texas Parks and Wildlife Web site: www.tpwd.state.tx.us



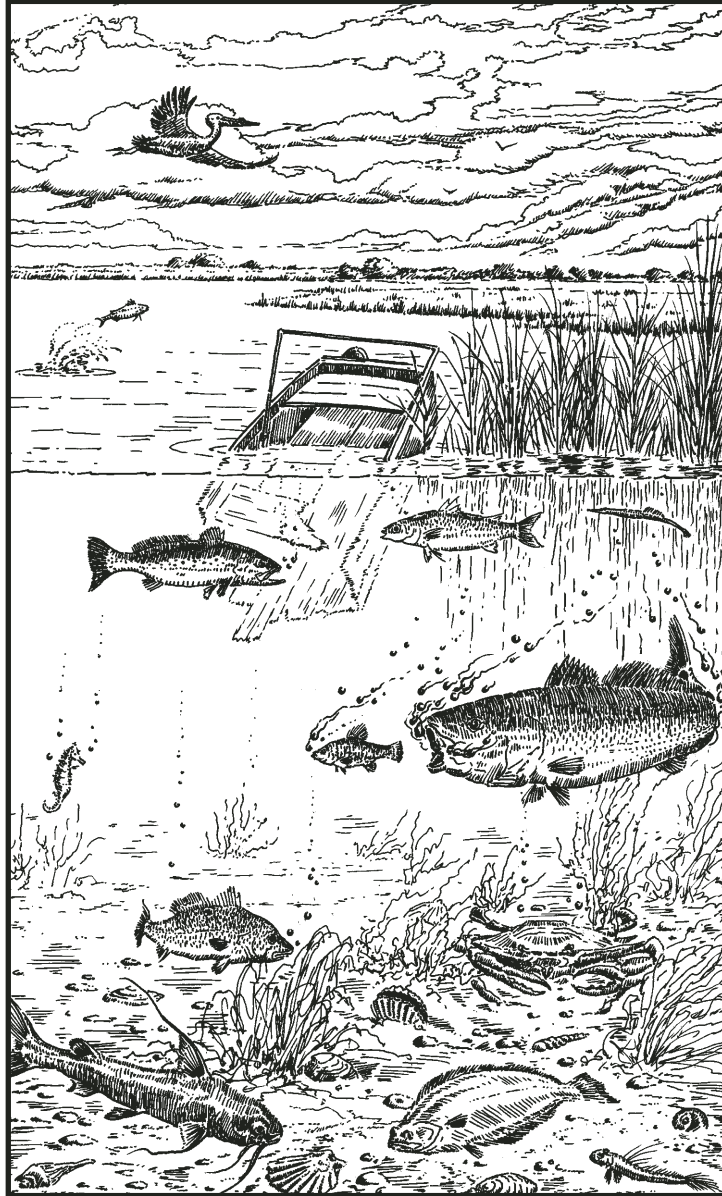
AQUATIC LIFE IN A RESERVOIR

Coastal Bays/Marshes

Coastal wetland habitats contain the largest diversity of plants and animals of any aquatic ecosystem. This is due in large part to the diversity of habitats that make up coastal wetlands. In the bays, water is salty, but fairly shallow, with seagrass beds providing important cover for fish, crabs, shrimp and shellfish. Sandbars, spoil islands and shell reefs also provide structure. Tidal movements influence the feeding activity of all species.

At the mouths of rivers and streams, the water is less salty with cattails and salt-tolerant reeds providing cover. The flow of freshwater helps maintain a fragile balance of water chemistry that many plants and animals have become adapted to and dependent upon. These areas are the nurseries for many saltwater fish, crabs, shrimp, and shellfish and their importance can't be overstated. In addition to aquatic species, coastal wetlands also support a diversity of bird life such as shore birds, wading birds, gulls, terns and pelicans. Songbirds migrating in the spring often travel great distances across the Gulf of Mexico before landing safely on Texas shores. Sadly, coastal wetland habitats are being destroyed at an alarming rate as a result of development, decreases in water quality and other threats. Communities and resource professionals are teaming up to conserve these productive habitats.

Anglers will find exciting fishing opportunities in these more shallow saltwater habitats. Spotted seatrout, red drum and southern flounder are a few of the more popular species to catch. Anglers use striped mullet, sheepshead minnows, shrimp and blue crab for bait along with a variety of lures.



COASTAL BAY AND MARSH HABITAT

Gulf Beachfront/Offshore Waters

The Gulf waters range from beachfront to offshore environments with depths varying from 1 or 2 feet for the beachfront to depths of over 100 feet offshore.

Several species of crustaceans, jellyfish, sea turtles and others, inhabit inshore and offshore waters supplying food for fish and others of their kind. The beachfront will contain fine shell deposits along with sandbars as one ventures out into the water.

The Gulf, on the other hand, has deep, open water with rock piles, drop-offs, gas and oil rig platforms and artificial reefs (wrecks, ash rock, rig platforms, etc.) for structure. Several species of mackerels, sharks, tunas, billfish and others are found following schools of baitfish throughout the Gulf. They frequent the rigs and other structure for easy meals.

Our structure-loving fish, snappers, triggerfish, spadefish and groupers, are a few which are found regularly occupying space around sunken wrecks, rock piles, platforms and artificial reefs. Anglers do well concentrating their fishing efforts in these locales.

Texas Parks and Wildlife works to achieve a balance between commercial fisheries and healthy fish populations.



AN ARTIFICIAL REEF PROVIDES HABITAT FOR COASTAL FISH