

Drought plaguing fish and wildlife

Victoria Advocate

Salinity levels force animals to adjust to survive



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My electric bill is supposed to be under \$300 during the winter months. So when it read \$311 last month, I began to inventory where my electricity was going. I haven't run the air conditioner since November, have reduced the pool filter and pump to run only two hours a day and seldom turn on the heater.

Then I realized it - the water well. The weather has been so dry my one-acre pond has been evaporating quickly, so I have run my well on average of 10 days a month since December.

I turned it on again Thursday.

I guess I should feel fortunate to have water and afford the price it takes to pump it. Some are not as fortunate, and have watched their ponds, watering holes, stock tanks and wetlands dry to dust.

The U.S. Department of Agriculture reported the middle coast from Freeport to Port O'Connor is in a moderate to severe drought. A line bordering Victoria and south indicate severe drought, with a 100-mile radius encompassing Austin and San Antonio termed exceptional - the most intense on the graph.

"Livestock are in trouble," said Dr. Randy Volkmer, DVM, of Bay City Veterinary Clinic. "There is no grass and no rain in sight and many people can't afford to feed out of their pockets. Many are selling their entire herd."

When livestock suffer, so do the whitetail deer herd. During drought conditions, supplemental feeding such as corn or protein help sustain deer. However, many hunters do not feed or cannot afford to feed outside of hunting season, and that season ended in January.

Most does were bred between October and December and are carrying offspring. Their 200-day gestation period is much like a human's, with lots of extra food and nutrients needed to sustain the life of the doe and her fawns. Food and water is even more important when carrying twins, which is the case in 90 percent of the does in Texas.

The condition of fawns when they hit the ground affect their life expectancy; and, if the drought continues through the summer, expect to see a shortage of fawns.

Of course, the cycle doesn't just affect next year. Since whitetails do not reach sexual maturity until the age of two, losing a year of deer production is like losing two years of reproduction from that population of the herd.

So how does the drought affect coastal fishing? As far as trout and redfish go, higher salinity levels send saltwater to the upper reaches of normally fresh rivers and tributaries. Case in point: lots of trout have been caught as far north as the Port of Bay City basin just outside of the city limits.

The upper reaches of the Lavaca River as well as tidal streams in Freeport that normally harbor catfish, now have redfish and speckled trout. The same holds trout on the upper coast on the rivers that feed Galveston Bay. The Trinity River north of IH-10 is salty as is the San Jacinto River north of IH-10.

"There were dolphins in the river (Colorado) past Selkirk," said retired guide Melvin Talasek. "That is the first time I have seen them this far up the river in the 40 years I have been in Matagorda."

Higher salinity levels affects the shrimp production during spring, which in turn affects white shrimp entering the bays during the fall.

Salinity is measured in parts per thousand (ppt), and beachwater normally runs 30-35 ppt. Most bay systems operate at 25-30 ppt, depending how much freshwater runoff has entered the bay due to rains. However, during periods of drought, bay salinity can climb even higher than the ocean. In fact, the Laguna Madre is a hypersaline lagoon and consistently yields 35 ppt or higher due to lack of freshwater inflow.

The problem rises in the marsh, where salinity levels normally range from 5-15 ppt, but climb higher during a drought. Marshes are nurseries for shrimp and other baitfish, and certain species of shrimp like white shrimp need 15 ppt or less to live and grow to optimal levels. Higher levels stunt growth and reproduction, leaving fewer shrimp to flood the bays during autumn. The result: fewer birds work due to fewer shrimp in the bay.

Brown shrimp, on the other hand, like high salt concentrations and actually thrive in levels reaching 35 ppt. Brown shrimp exit the marsh from May through July. If you see birds working during the summer, they usually working over "brownies."

The upside of the drought has been the relief it has given homeowners waiting for roof repairs from Hurricane Ike. Lots of blue tarps remain on homes throughout the coastal region; however, don't quit praying for rain.

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