



## **Ron Henry Strait: Freshwater inflow can be plus**

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**Ron Henry Strait**  
**Express-News Staff Writer**

Rains are a blessing or a curse depending on how long it has been since it rained in your realm.

Some coastal bay anglers have been calling it a curse this summer, blaming the precipitation from six weeks of rain for dampening their catching success.

I paid a visit two weeks ago to the Lamar Peninsula near Fulton and watched small rivers of runoff flood into St. Charles Bay near Goose Island. It made me wonder how marine creatures cope with what might be considered a hostile "sweet" environment.

Are they damaged or do they leave town, so to speak, because of the freshwater inflow?

Dennis Pridgen doesn't think either is the case.

He is a Texas Parks & Wildlife Department marine biologist who has studied and worked the Aransas Bay for more than a decade.

"The net impact is positive," Pridgen said. "All the silt and nutrients coming into the bay will promote the food chain."

His professional experiences have encompassed some familiar estuarine environments - Aransas, Copano, St. Charles, Mesquite and other bays in the Rockport area - and he was talking about estuarine-dependent species, sea creatures that depend in part on estuaries for a successful life cycle.

Estuaries (marshes and bays) are the places where freshwater meets saltwater. The species referenced included speckled trout, redfish, flounders, black drum, blue crabs, white shrimp and oysters.

Estuaries are where the very young and juveniles of those species grow to maturity.

In the case of speckled trout, estuaries serve as spawning grounds as well as nurseries. To hatch, a speck's eggs need salinity measuring 18 parts per thousand, or ppk.

Copano Bay averages 18 ppk, but last week tested at 3 ppk, with the west side almost fresh water. Aransas Bay averages 25 ppk and tested at 12 ppk. St. Charles went from 15 to 3 ppk, and Mesquite Bay dropped to 7 ppk.

It seems that freshwater flooding into those trout havens would impact the trout populations most.

Not so, according to Pridgen: "The (speckled trout) is mobile. Trout will shift to salty water."

He said they will shift toward the lower ends of the bays nearer passes and mentioned similar circumstances three years ago when Copano Bay received a big dose of runoff and the trout concentrated on the inside shoreline along San Jose Island.

As for redfish and flounders, they spawn in winter in the open Gulf of Mexico and their young will migrate back into the estuaries over a period of weeks early next year. Both species can tolerate brackish water.

White shrimp spawn in the gulf and the juvenile offspring migrate to the estuaries, where they thrive in salinities of 10 ppk and less. Shrimp are a key link in the food chain Pridgen mentioned earlier.

Blue crabs also have a bright future, too, Pridgen said.

Female crabs need salinities of 25 ppk to successfully spawn, and they will move to the gulf, where the salinity is about 35 ppk, to spawn.

Tiny crab offspring will migrate back to the estuaries to grow. Juvenile crabs need less than 10 ppk salinity to survive. Typically, the crab population escalates in conditions like this, Pridgen said.

Next summer will see a bumper crop of immature crabs - great redfish bait - and if conditions hold, the summer of 2009 should be a great year for humans who like to eat crabs.

It's a blessing to be at the top of the seafood chain.

Snake-proofing: The German Shorthair Pointer Club of San Antonio will conduct a snake-proofing clinic for dogs on Aug. 18 at the club lease in Cibolo.

The clinic will train dogs to avoid snakes, a good lesson to learn, especially for bird dogs going afield next month for doves.

Registration reserves a specific time slot for training. Fees range from \$30 to \$40. The number of slots is limited.

Registration and appointment information are available by calling (830) 606-9663.

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*rstrait@express-news.net*