

# Crane deaths raise alarm about water rights

## 23 whoopers died over the winter and biologists blame low river flow

By **MATTHEW TRESAUGUE**  
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**April 19, 2009, 11:08PM**

A record number of whooping cranes have died while wintering along the Texas coast this year, leaving biologists stunned and once again placing the Guadalupe River at the center of the state's ongoing battle over water rights.

A dry spell has reduced the Guadalupe's flow so severely that the supply of fresh water and food for the endangered whooping cranes dwindled in San Antonio Bay. As a result, 23 whoopers have perished, the deadliest year on record for the majestic bird, federal and state wildlife officials said.

The die-off has infused a jolt of heightened urgency into the debate over the amount and timing of flows in the Guadalupe and how to protect the river's ecosystem and the Gulf Coast estuaries that depend on fresh water. Historically in Texas, water not tapped by cities, ranchers and industry and left to run to the Gulf of Mexico has been considered wasted.

"It's not people's fault that we're in a drought," said Tom Stehn, a U.S. Fish and Wildlife biologist studying the cranes at the Aransas National Wildlife Refuge, their wintering grounds near Rockport. "But I wonder how much worse we're making it."

The Guadalupe, a 300-mile-long river that stretches from the Hill Country to San Antonio Bay, has been a battleground before. At one point, a conservation group labeled it as one of the country's most endangered rivers, just as water suppliers considered pumping water near its mouth to quench San Antonio's growing thirst.

Although that plan is on the shelf, studies are under way to determine what is needed to sustain the whoopers. The first study, commissioned by two river authorities at the cost of \$2 million, is set for release this month.

Douglas Slack, a Texas A&M University biologist who conducted the five-year study, wouldn't comment on the findings before their release, but said the research didn't cover the latest and deadliest season so far for the cranes. He suggested that his work wouldn't be the final say on the matter.

"We'll continue to see ups and downs in precipitation, and it's pretty clear that San Antonio and Austin won't stop growing," Slack said. "Questions of inflows will continue throughout my lifetime and yours."

For Stehn, who has observed the iconic birds for years, the drought has made it clear that the whoopers' survival depends upon the availability of blue crabs, which account for nearly 90 percent of the cranes' diet and need a certain amount of fresh water to survive.

The world's last migratory flock of whooping cranes spends the winter at the Aransas refuge before leaving every April for a 2,400-mile journey to Canada's Wood Buffalo National Park, the birds' summer home.

The season began with much promise, with a record 270 whoopers arriving along the Texas coast last fall.

But reduced fresh water meant fewer blue crabs. By January, with virtually no blue crabs on the marshy delta, the cranes began to eat clams and smaller fiddler crabs, but those don't provide as much protein, Stehn said.

To supplement the cranes' diet, refuge managers provided corn, marking the first time since the 1950s that they fed the whoopers.

"Usually, when you see a whooping crane, it's magnificent," Stehn said of North America's tallest bird. Adults, whose bodies are snowy white except for black wingtips and a red forehead, stand 5 feet tall with a wingspan of 7 1/2 feet. "This year, they were looking ratty. The importance of blue crabs to the whooping crane population is just smacking us right in the face."

While the whooping cranes wintered on the coast, the drought became severe. The inflows for San Antonio Bay from December to March were the lowest since 1956, the height of the worst drought on record for Texas, said Norman Johns, an Austin-based scientist for the National Wildlife Federation.

The result: a saltier bay, fewer blue crabs and several emaciated whooping crane carcasses.

The challenge ahead is to manage the state's rivers in a way that enough freshwater flows into coastal estuaries to provide nutrients, sediments and the proper mix of salt and fresh water for sustaining scores of species, including the cranes, scientists said.

At the same time, there are new urban demands for water, and increasing pressures on the Guadalupe.

State lawmakers recognized the conflict two years ago, passing a bill that requires the study of what are called environmental flows for every river system in Texas. Although the new law began the process of preserving water for the health and productivity of the ecosystems, the outcome isn't guaranteed.

A 1998 state study found that the Guadalupe estuary needs 1.15 million acre-feet, or 363 billion gallons, of fresh water a year from the river. Some interests have criticized the number as too high.

"It's not high most of the time, but during a drought we shouldn't expect it to be available," Johns said. "It's too high during a drought, and that's when push comes to shove."

[matthew.tresaugue@chron.com](mailto:matthew.tresaugue@chron.com)

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