

## Illness hits SW. Fla sea birds hard

### Red tide likely suspect, experts say

By Kevin Lollar

[klollar@news-press.com](mailto:klollar@news-press.com)

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Intern Lauren Solomon struggles Friday to feed one of the many injured pelicans housed at the wildlife hospital at the Conservancy of Southwest Florida in Naples. Since Nov. 1, 63 pelicans have been taken to the Conservancy for possible red tide-related illnesses and injuries from fishing hooks and line. Though most get better in four to five weeks, the difference in the number being treated is "huge," said Joanna Fitzgerald, manager of the wildlife rehab center.

Valerie Roche/news-press.com

Marine birds in Southwest Florida are getting sick, and the leading suspect is red tide, even though little or no red tide has been in the area for weeks.

Hardest hit have been brown pelicans in Collier County: Since Nov. 1, the Conservancy of Southwest Florida Wildlife Rehabilitation Center has treated 63 brown pelicans.

"We're seeing a huge difference in pelican numbers: Last year in the same time frame, we had 17," said Joanna Fitzgerald Vaught, manager of the wildlife rehab center.

"These birds have a hard time standing. There's some complete paralysis. They're flat out. They have no blink response. They're a little thin."

Because no antidote exists for red tide toxin — called brevetoxin — the birds receive supportive care.

"We rehydrate them and feed them," Vaught said. "We start tube feeding them fish mush, then whole fish as they slowly get their strength back."

Most of the Conservancy's birds have been getting better in four to five weeks.

The Clinic for Rehabilitation of Wildlife on Sanibel has been treating birds of various species for similar symptoms.

Species include brown pelicans, white pelicans, cormorants, terns, gulls and several kinds of shorebird.

"We don't have huge numbers, nothing like Naples," CROW operations manager Anita Pinder said. "It's just kind of steady flow of birds for a month or so."

CROW and the Conservancy have sent bird carcasses to Danielle Stanek at the Florida Fish and Wildlife Research Institute for necropsies (post-mortem exams) and to be tested for brevetoxin and other toxins.

When manatees die from red tide poisoning, they show a number of gross symptoms, including bloody froth from the nose, swollen and bloody kidneys, and wet, bloody lungs.

"With birds, a lot of times we don't have a lot of obvious changes," Stanek said. "One thing that shows up sometimes is that the lungs appear red and congested. But not always."

So, scientists must rely on lab tests to determine cause of death.

"We're looking for toxins, pesticides, things like that," Stanek said. "We'll see what turns up."

"One thing that turned up in a single pelican from the Keys is botulism. But botulism is tricky because you need blood from a live sick animal, and most of the birds we get are dead."

If brevetoxin turns out to be the culprit in these avian illnesses, the question is how, because recent tests show no red tide or low concentrations of the red tide organism in area waters.

The answer might lie in discoveries made following another red tide event.

When 107 bottlenose dolphins died in the Panhandle during the spring of 2004, scientists found high levels of brevetoxin in their stomachs, even though no red tide was in the area.

Then scientists caught and tested live fish in the Panhandle area and determined plankton-eating fish can accumulate brevetoxin in their gut and tissues.

So the dolphins ate contaminated fish and died from red tide poisoning when red tide wasn't present.

Maybe Southwest Florida's sick birds ate brevetoxin-laced fish.

"That could be very likely, the way fish move and the way birds move," Vaught said. "For sure, fish could harbor toxin, and I can see the birds getting into the fish."

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