## Tampa Bay Units

## Analysis targets commercial fishing's role in manatee deaths and injuries



Craig Pittman, Times Staff Writer Thursday, January 23, 2014

How many manatees can commercial fishermen in Florida injure or kill every year without affecting the future of a species that has been on the endangered list since 1967?

The answer, according to an analysis the U.S. Fish and Wildlife Service unveiled Thursday, is 14.

The only problem: The agency says the annual average number of deaths and injuries due to commercial fishing is 99. And that calculation doesn't include the record 829 manatees overall that died in 2013.

To the wildlife agency in charge of protecting manatees —- which have become for Florida what pandas are to China — the results of the analysis are not that big a deal.

Compared with everything else, commercial fishing's impact on the manatee population is "pretty minimal," said Chuck Underwood, a spokesman for the Fish



and Wildlife Service's Jacksonville office, which deals with manatee issues. "Don't extrapolate that into questions about overall manatee recovery and population status."

But to Pat Rose, a longtime manatee biologist and executive director of the Save the Manatee Club, it's a big deal indeed.

"They can try to hide behind a technicality," Rose said. "The reality of what it means is that they're way behind their target. ... We're nowhere near where we need to be in managing human take of manatees."

According to David Laist, a senior analyst with the U.S. Marine Mammal Commission, they're both right.

The study is indeed focused solely on commercial fishing, not recreational boating or other human-caused manatee injuries and deaths that get more attention, he noted.

However, the fact that the goal is so far from reality "indicates that there is more management of manatees that needs to be done."

## A decade of Florida manatee deaths:

2004: 276

2005: 396

2006: 417

2007: 317

2008: 337

2009: 429

2010: 766

2011: 453

2012: 392

2013: 829

## Source: Florida Fish and Wildlife Conservation Commission

Bob Jones, who has been executive director of the Southeastern Fisheries Association for four decades, said he had not seen the report yet but "I don't believe it." In his view, commercial fishermen play a negligible role in the future of manatees.

The wildlife agency's analysis is based on data that goes through 2012, which means it does not include last year's record die-off caused by a Red Tide algae bloom in the Lee and Collier county region, or the mysterious die-off in the Indian River Lagoon on the state's Atlantic

coast. The total deaths of 829 manatees last year means the loss of about 16 percent of the estimated total population — and biologists say 173 of the dead were breeding-age females.

The analysis also uses an old number as a statewide population estimate. It's based on the number of manatees that were counted in the state's last aerial survey back in January 2011: 4,834. The weather has not been right for surveys since then, but today state biologists hope to launch the first such aerial count in three years.

The analysis is what's known as a "stock assessment," most frequently used to set commercial fishing limits. In a stock assessment, federal officials analyze the available information about a particular species to determine what its optimum population might be and how many could be taken by anglers without being noticed.

That second number is known as the Potential Biological Removal, or PBR. To calculate the PBR, the agency multiplies three other numbers together: the minimum estimated population statewide (4,834) times half of the maximum rate of reproduction for that population (3.1 percent) times a number called the "recovery factor," which for endangered species is 0.1. The result is 14.98, which the agency rounded to 14.

In addition to being clobbered by boats, the death and injury rate included in that figure includes being crushed by canal locks and getting tangled in —- or consuming —- shrimp trawls, shrimp nets, crab traps, seines, shiner nets and hoop nets, trot lines or fishing line, the assessment says.

The fact that the annual average of 99 is far higher than the goal of 14 "indicates that we can do more to protect manatees from unnecessary human induced mortality," said Jaclyn Lopez, Florida staff attorney for the Center for Biological Diversity.