

[From Fall 1995]

## **Weakfish Not so "Weak"**

The first and second phases of the weakfish mortality study have been compiled and the results are quite interesting. The survival rate of weakfish caught on hook and line and in pound nets, and then released, is higher than expected.

Project leader, Gary Swihart, of the U.S. Fish and Wildlife Service, Gloucester Office of Fishery Assistance, White Marsh, Virginia, began the initial study on May 30. The first phase concluded twenty-four days later. In the first two and a half days of the study, 300 weakfish were caught on hook and line and placed in ten cages located in the Chesapeake Bay near Kiptopeke State Park. The fish were observed twice a day and, after 36 hours, only six fish had died. No additional mortality occurred over the next few days. On June 7, five of the cages were emptied. By June 9, another 60 weakfish were caught and two cages filled. Only one of the fish in these two cages died during the observation period.

Bad weather over the next few days made it impossible to fill the remaining cages. So, on June 23, a decision was made to end the first phase of the study. The 210 fish that remained in the cages were removed and weighed, measured, sexed, and hook locations noted. Also, the ear bones (otoliths) were removed from some of the fish to accurately determine their age. The results were surprising. Fish that were 11 to 12 inches long varied from one to five years in age. However, 71% of the eleven inch fish and 64% of the 12 inch fish were three years old.

The second phase of the weakfish mortality study involved collecting weakfish from a pound net. On July 7, Project Leader Swihart and volunteers accompanied pound-netter Kenny Heath and his crew from Heath Seafood to fish his net. Weakfish collected from the pound net were handled no differently than during normal pound-netter operations. As fish were dipped from the pound net and dumped into Mr. Heath's boat, the FWS volunteers collected the weakfish and put them in a live well. It took approximately 20 minutes to transport the fish to the cages. A total of 300 fish were collected during the two-day netting phase of the study. A total of 52 fish (18%) died during the 300-hour study period. All mortality occurred during the first 84 hours.

Another hook and line study was scheduled to start in early August to determine if warmer water had an impact on the survival rate of the weakfish. However, thanks to the threat of hurricane Felix, volunteers were unable to start fishing until August 21. Very few weakfish were caught over the next ten days and, with water temperatures starting to drop, a decision was made to cancel that phase of the study. In October, the weakfish study will resume, with Project Leader Swihart checking the mortality rate of weakfish caught in gill nets.

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