

When legally-constructed Turtle Excluder Devices (TEDs) operate correctly in shrimp otter trawls, a small percentage of the sea turtles entering the nets (i.e., ~3%) still do not escape and are captured. When TEDs are installed incorrectly and/or not properly maintained, TED effectiveness can be reduced and result in more than a 3% sea turtle capture rate; in severe cases, TED effectiveness can be completely compromised (i.e., have a 100% sea turtle capture rate).

The April 18, 2014, Biological Opinion requires NOAA Fisheries to maintain monitoring and ensure compliance with TED regulations at a level that keeps overall average sea turtle catch rates (i.e., sea turtles that do not escape via the TED and are captured) in the shrimp otter trawl fleet at or below 12%. NOAA's Office of Law Enforcement (OLE) and Southeast Fishery Science Center, Pascagoula Gear Monitoring Team (GMT), inspect TEDs in otter trawls on shrimp vessels in the U.S. Atlantic and Gulf of Mexico for their compliance with TED regulations. The GMT, with assistance from NOAA Fisheries Southeast Regional Office's Protected Resources Division, analyzes the TED inspection data to estimate sea turtle capture rates and TED effectiveness.

In the below table, we present April 2014 through October 2015 Southeastern shrimp otter trawl fleet TED inspections, compliance, sea turtle capture rates, and TED effectiveness. In estimating overall sea turtle capture rates and TED effectiveness, NOAA Fisheries evaluates the various types and degrees of severity of TED violations documented and their corresponding estimated effects on small and large sea turtles. Not all TED violations have the same impact on sea turtles capture rates. The April 18, 2014, Biological Opinion reviews different types of violations and associated sea turtle capture estimates and analysis methods. For more information, please review the April 18, 2014 Biological Opinion, Table 15, Sections 2.1.1 and 5.1.3.2.

**Monthly Southeastern Shrimp Otter Trawl Fleet TED Inspections, Compliance, Sea Turtle Capture Rates, and TED Effectiveness (April 2014 - October 2015).**

| Month       | Vessels Inspected For TED Compliance by OLE and/or GMT | Inspected Vessels Required to Have TEDs That Were Found In Violation (i.e., Non-Compliant with TED Regulations) | Inspected Vessels Required to Have TEDs That Were Fully Compliant With TED Regulations | Vessels Inspected That Were Found Fully Compliant with TED Regulations | Vessels Inspected That Were Found Non-Compliant | Overall Capture Rate for all Kemps Ridleys and Juvenile Loggerheads and Greens | Overall Capture Rate for all Leatherback and Adult Loggerheads and Greens | Overall Average Sea Turtle Capture Rate | Overall TED Effective Rate |
|-------------|--|---|--|--|---|--|---|---|----------------------------|
| <b>2014</b> |  |   |  |  |   |  |   |   |                            |
| April       | 50   | 11  | 39   | 78%  | 22%   | 10%  | 15%   | 12%                                     | 88%                        |
| May         | 23   | 3   | 20   | 87%  | 13%   | 3%   | 3%  | 3%                                      | 97%                        |
| June        | 7  | 2   | 5  | 71%  | 29%   | 14%  | 14%   | 14%                                     | 86%                        |
| July        | 83   | 16  | 67   | 81%  | 19%   | 8%   | 10%   | 9%                                      | 91%                        |
| August      | 48   | 6   | 42   | 88%  | 13%   | 7%   | 6%  | 6%                                      | 94%                        |
| October     | 4  | 0   | 4  | 100%   | 0%  | 3%   | 3%  | 3%                                      | 97%                        |
| November    | 15   | 0   | 15   | 100%   | 0%  | 3%   | 3%  | 3%                                      | 97%                        |
| December    | 6  | 1   | 5  | 83%  | 17%   | 11%  | 4%  | 8%                                      | 93%                        |
| <b>2015</b> |  |   |  |  |   |  |   |   |                            |
| January     | 4  | 0   | 4  | 100%   | 0%  | 3%   | 3%  | 3%                                      | 97%                        |
| February    | 0  | N/A   | N/A  | N/A  | N/A   | N/A  | N/A   | N/A                                     | N/A                        |
| March       | 42   | 13  | 29   | 69%  | 31%   | 7.4%   | 13.6%   | 10.5%                                   | 89.5%                      |
| April       | 15   | 7   | 8  | 53.3%  | 46.7%   | 25.3%  | 22%   | 23.7%                                   | 76.3%                      |
| May         | 12   | 3   | 9  | 75%  | 25%   | 3.6%   | 9.4%  | 6.5%                                    | 93.5%                      |
| June        | 18   | 5   | 13   | 72.2%  | 27.8%   | 21.6%  | 18.8%   | 20.2%                                   | 79.7%                      |
| July        | 44   | 2   | 42   | 95.5%  | 4.6%  | 6.5%   | 4.9%  | 5.7%                                    | 94.3%                      |
| August      | 9  | 1   | 8  | 88.9%  | 11.1%   | 3%   | 3%  | 3%                                      | 97%                        |
| September   | 25   | 4   | 21   | 84%  | 16%   | 11%  | 6.2%  | 8.6%                                    | 91.4%                      |
| October     | 4  | 1   | 3  | 75%  | 25%   | 14.8%  | 4.8%  | 9.8%                                    | 90.3%                      |