# Summary of Mid-Atlantic Commercial Blueline Tilefish Data

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SEDAR50-DW10

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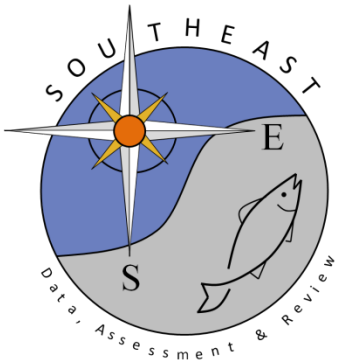

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# Draft Working Paper on
# Summary of Mid-Atlantic Commercial Blueline Tilefish Data

Photo Credit: Duane Raver, Jr.

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Northeast Fisheries Observer Program (NEFOP) data is summarized in Section A and commercial logbook VTR (vessel trip report) data is summarized in Section B.

Section A: NEFOP Observer Data

NEFOP data on blueline tilefish is summarized in Tables 1-3 and Figures 1-7. Observer coverage rates were lower in the 1990s relative to the late 2000s (Table 1). In addition, the lack of a commercial blueline code in the 1990s may have contributed to lack of recorded blueline bycatch in the observer data. Observations of blueline tilefish in the observer data is seen mostly as bycatch in the trawl fisheries since there is minimal data on directed blueline tilefish trips in the dataset (Table 2). Confidentiality constraints will apply to information on directed blueline trips. On a seasonal basis there were less blueline tilefish observed from May to August (Table 3). However this may be influenced by changes in fishing effort in the trawl fishery during the summer. The indication of a shift in the distribution north relative to the overall distributions seen in the surveys (see first map in survey working paper) could also be influenced by difference in effort in the trawl fisheries (Figure 1). There appears to be less trawling effort in blueline tilefish habitat near Cape Hatteras relative to fishing grounds further north near Hudson Canyon. Little difference was seen in the distributions when the times series was split between 1997-2007 and 2008-2015 (Figures 2-3). Total effort in the observer data was also plotted for the trawl (Figure 4-5) and longline (Figures 6-7) fisheries in an attempt to better interpret the distributions of blueline bycatch. The apparent break in the distribution near the mouth of Chesapeake Bay may also be influence by lower relative trawl effort in that specific area.

Table 1. Discard and kept pounds of blueline tilefish on NEFOP trips. The number of observed trips and hauls which caught blueline tilefish is also shown. NA indicates confidential data.

| | Weight (lbs.) | | | Observed | |
|---|---|---|---|---|---|
| Year | Discards | Kept | Total | trips | hauls |
| 1997 | | NA | NA | 2 | 2 |
| 1999 | NA | | NA | 1 | 1 |
| 2000 | | NA | NA | 2 | 6 |
| 2001 | NA | | NA | 1 | 1 |
| 2003 | 11 | 46 | 57 | 3 | 8 |
| 2004 | 1,310 | 780 | 2,090 | 12 | 45 |
| 2005 | 121 | 311 | 432 | 8 | 30 |
| 2006 | NA | NA | NA | 2 | 6 |
| 2007 | | 100 | 100 | 4 | 8 |
| 2008 | 182 | 308 | 490 | 8 | 19 |
| 2009 | 287 | 754 | 1,041 | 18 | 59 |
| 2010 | 322 | 634 | 955 | 27 | 83 |
| 2011 | 869 | 1,070 | 1,939 | 37 | 99 |
| 2012 | 241 | 385 | 626 | 30 | 60 |
| 2013 | 1,295 | 1,960 | 3,255 | 30 | 78 |
| 2014 | 179 | 7,965 | 8,144 | 28 | 73 |
| 2015 | 157 | 1,067 | 1,224 | 36 | 81 |
| 2016 | 5 | 306 | 311 | 3 | 4 |
| Total | 4,995 | 15,989 | 20,983 | 252 | 663 |

Table 2. The number of total observed trips by gear type from 1997-2016 which caught blueline tilefish.

| longline | trawl | gillnet | pot |
|---|---|---|---|
| 6 | 234 | 10 | 3 |

Table 3. Pounds of blueline tilefish on NEFOP trips by month and year. NA indicates confidential data.

| year | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1997 | | | | | | | | NA | | | | | NA |
| 1999 | | | | | | | | | | NA | | | NA |
| 2000 | | | | | | | | NA | NA | | | | NA |
| 2001 | | | | NA | | | | | | | | | NA |
| 2003 | | | | | | | 16 | | | | 36 | 5 | 57 |
| 2004 | 104 | | | | | | 1 | | | 1,848 | 69 | 68 | 2,090 |
| 2005 | 1 | 183 | 82 | | | | | 1 | | 35 | 130 | | NA |
| 2006 | NA | | | | | | | | | | | | 68 |
| 2007 | | | 15 | 85 | | | | | | | | | 100 |
| 2008 | | 240 | | 3 | | | | | 65 | 65 | | 117 | 490 |
| 2009 | 1 | 20 | 9 | 311 | | | | | | 181 | 332 | 188 | 1,041 |
| 2010 | | 37 | 32 | 7 | | 15 | | 5 | 155 | 395 | 217 | 93 | 955 |
| 2011 | 11 | 10 | 26 | 3 | | | | | 158 | 503 | 943 | 286 | 1,939 |
| 2012 | 129 | 182 | 148 | 3 | | | | | 29 | 97 | 27 | 12 | 626 |
| 2013 | 13 | | 21 | 4 | | | 1 | 1,518 | 858 | 800 | 34 | 5 | 3,255 |
| 2014 | 28 | 39 | 96 | 2 | 10 | 2 | 5 | 45 | 5,951 | 1,305 | 646 | 14 | 8,144 |
| 2015 | 171 | 11 | 349 | 53 | 5 | 4 | 9 | | 223 | 367 | 32 | 1 | 1,224 |
| 2016 | 9 | 302 | | | | | | | | | | | 311 |
| Total | 467 | 1,024 | 777 | 471 | 15 | 21 | 31 | 1,568 | 7,439 | 5,595 | 2,467 | 789 | 20,663 |

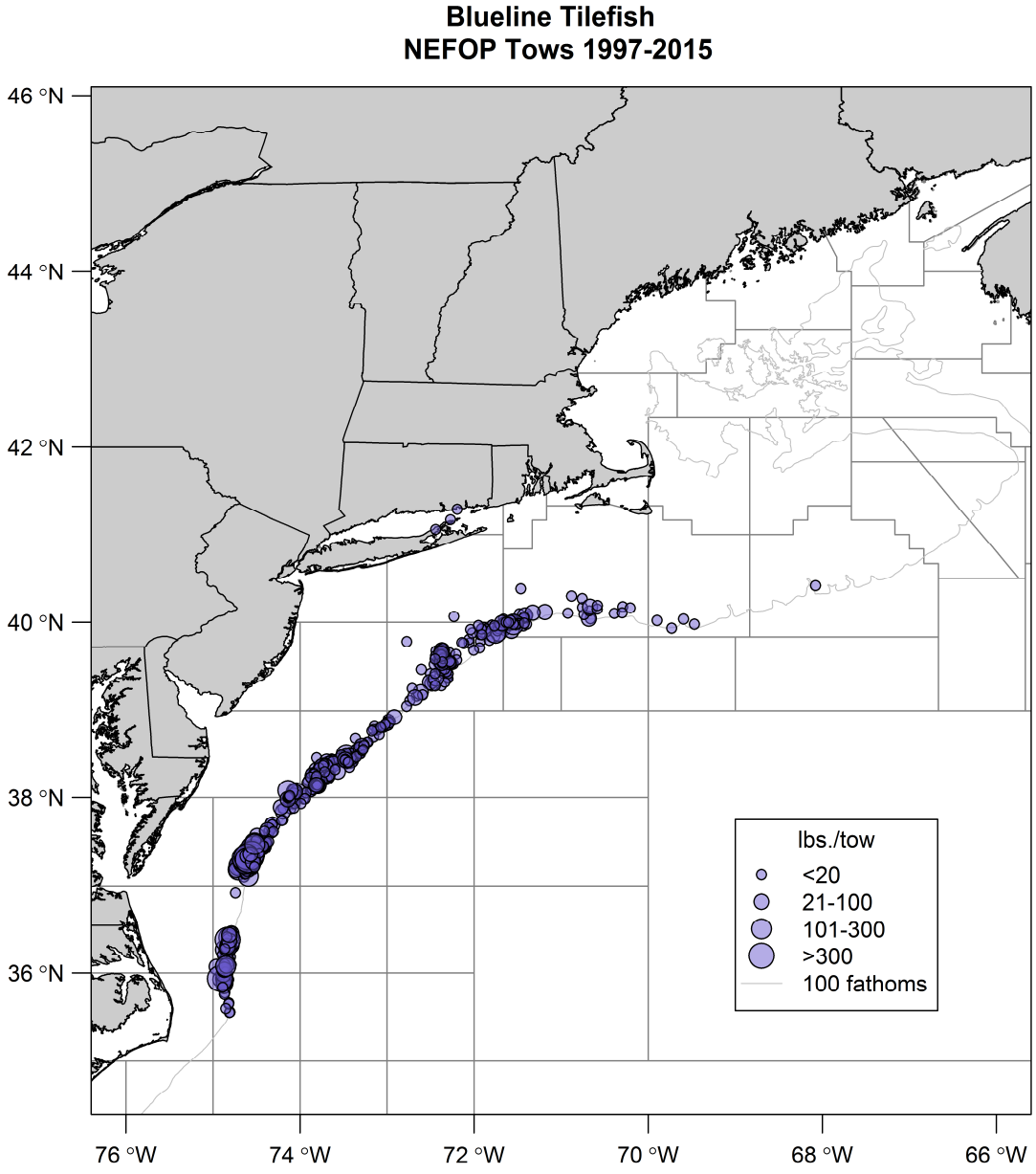



Figure 1. Blueline tilefish caught in pounds for NEFOP hauls for all gear types from 1997 to 2015.

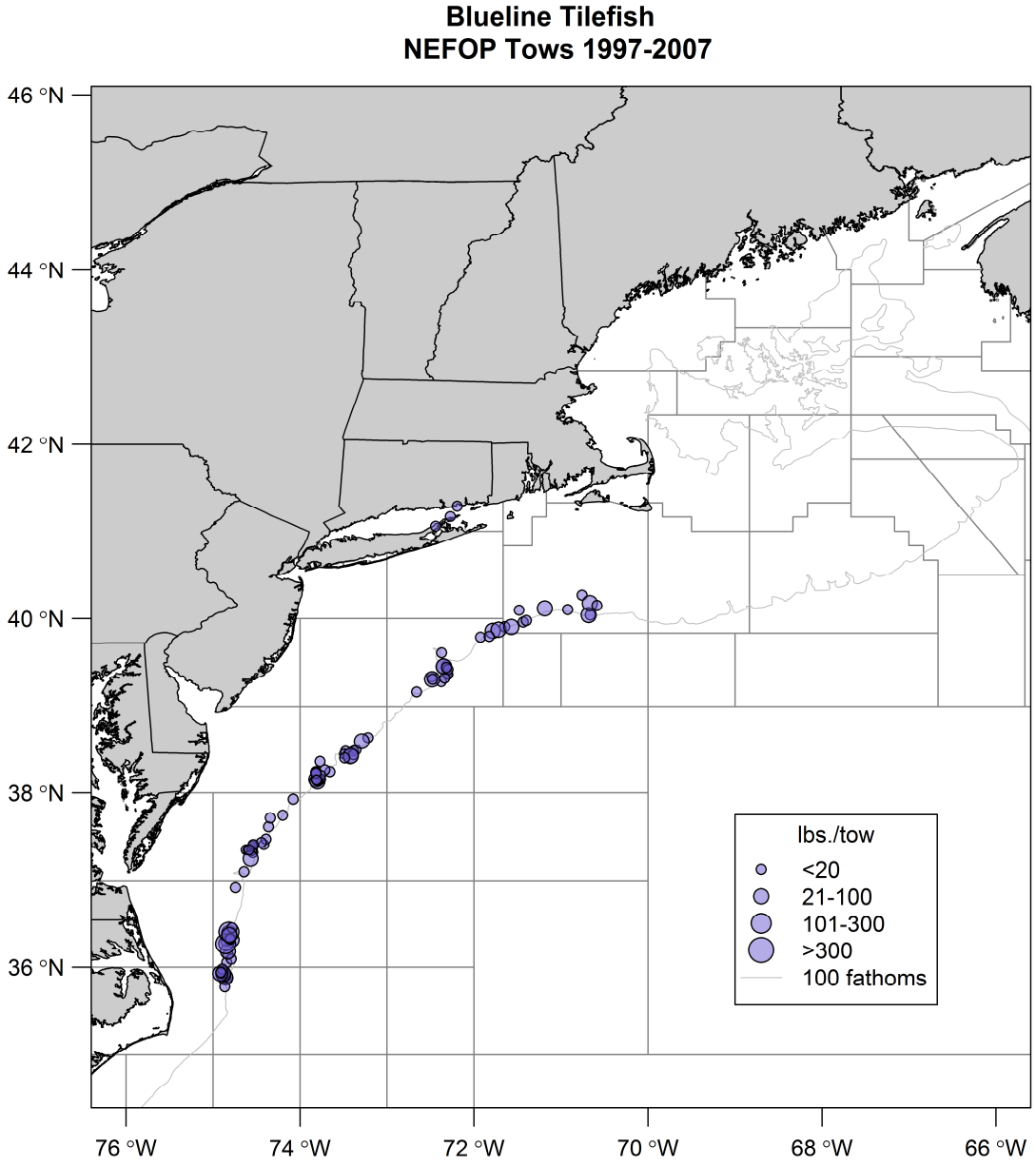



Figure 2. Blueline tilefish caught in pounds for NEFOP hauls for all gear types from 1997 to 2007.

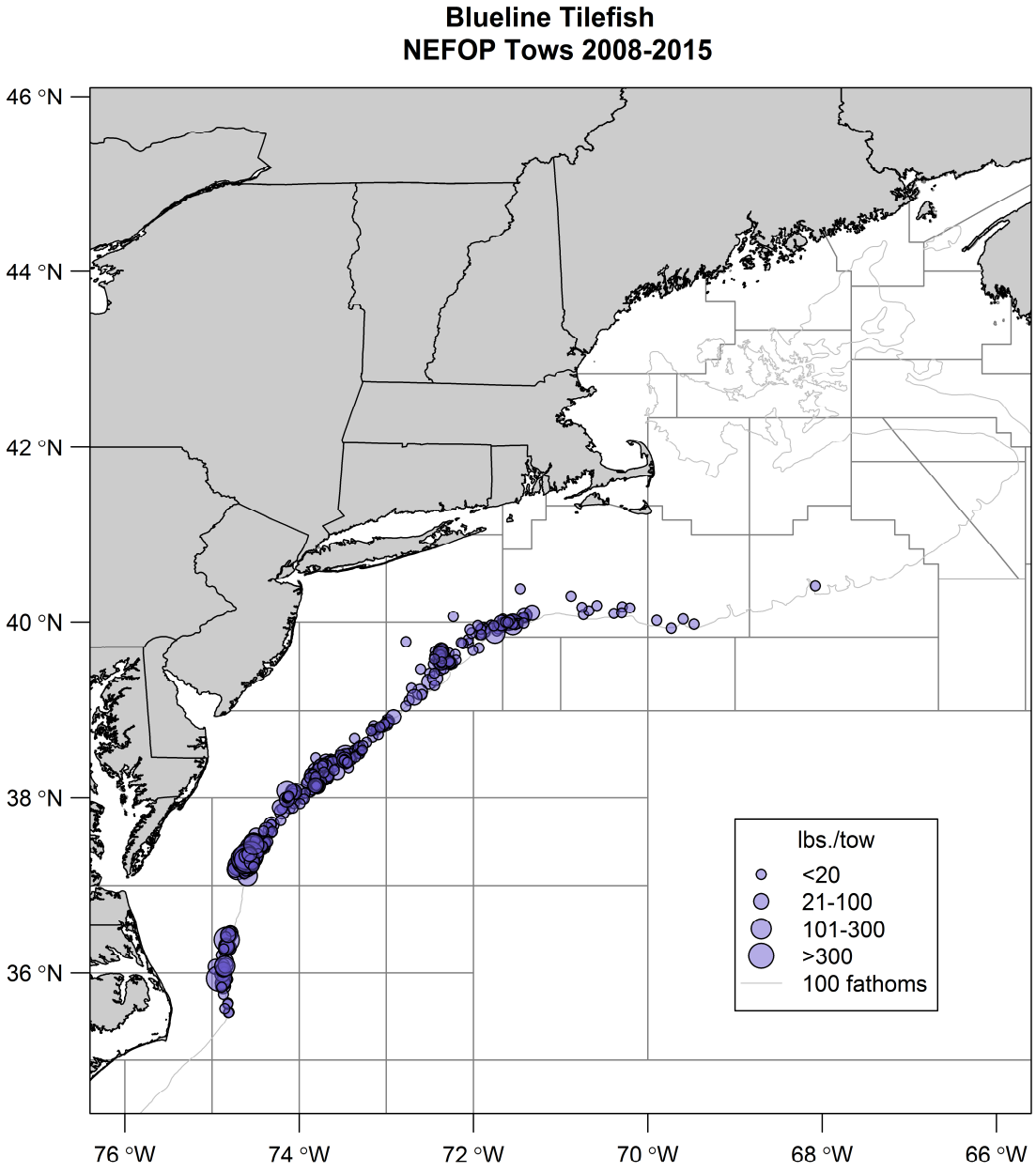



Figure 3. Blueline tilefish caught in pounds for NEFOP hauls for all gear types from 2008 to 2015.

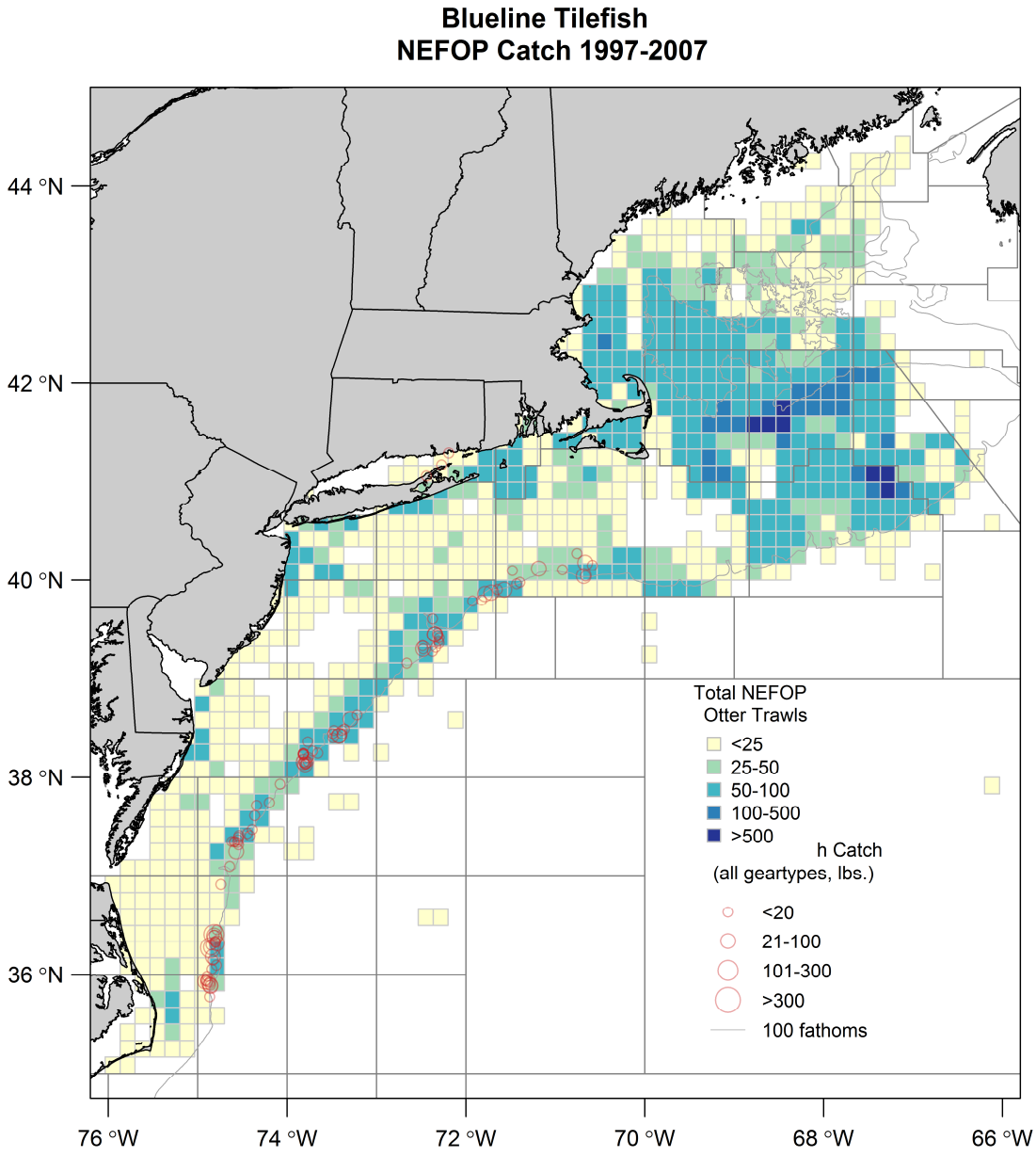
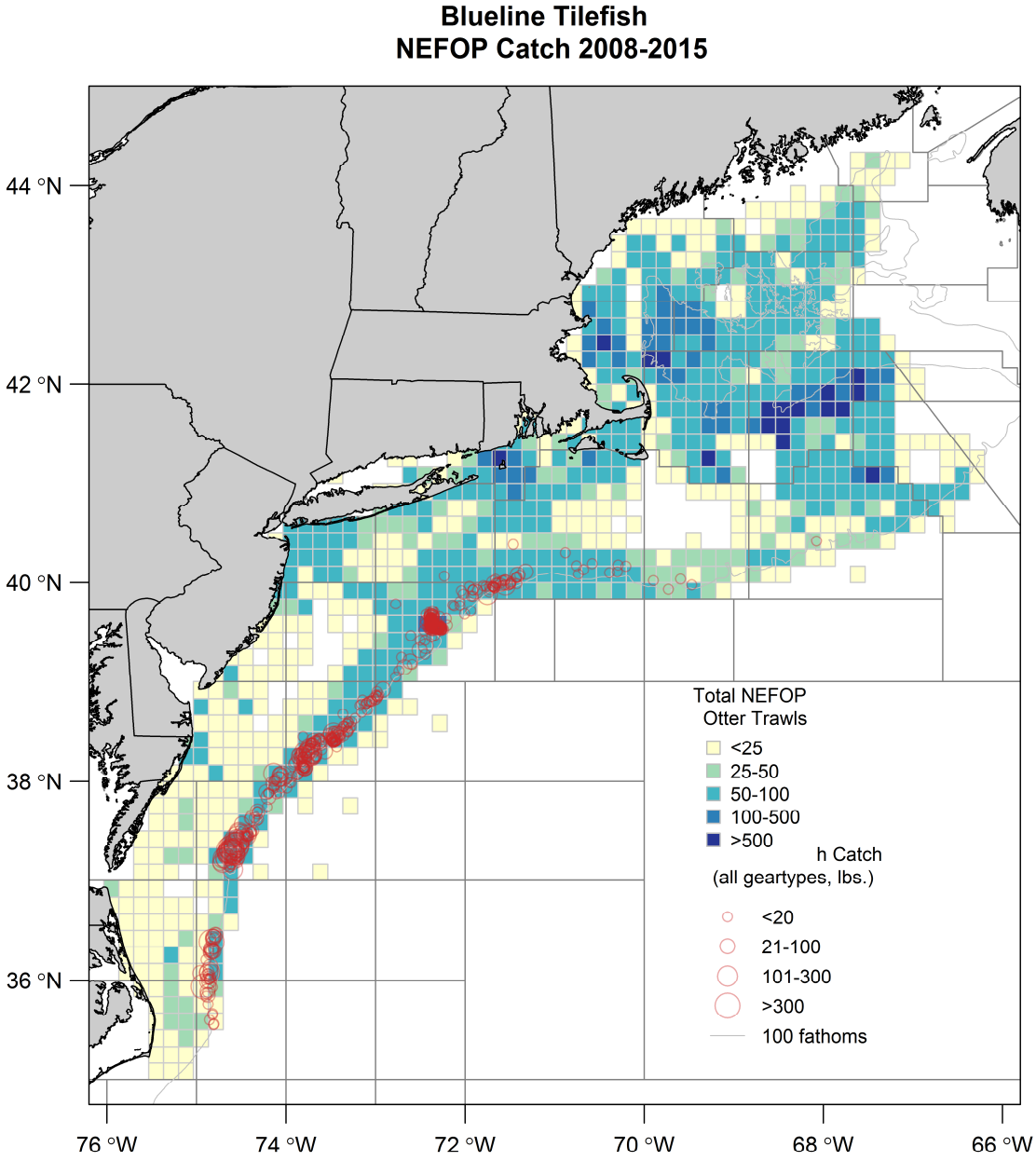



Figure 4. Blueline tilefish caught in pounds for NEFOP hauls for all gear types from 1997 to 2007. Total NEFOP trawl effort (1997-2007) in total tows is also shown by ten minute square.

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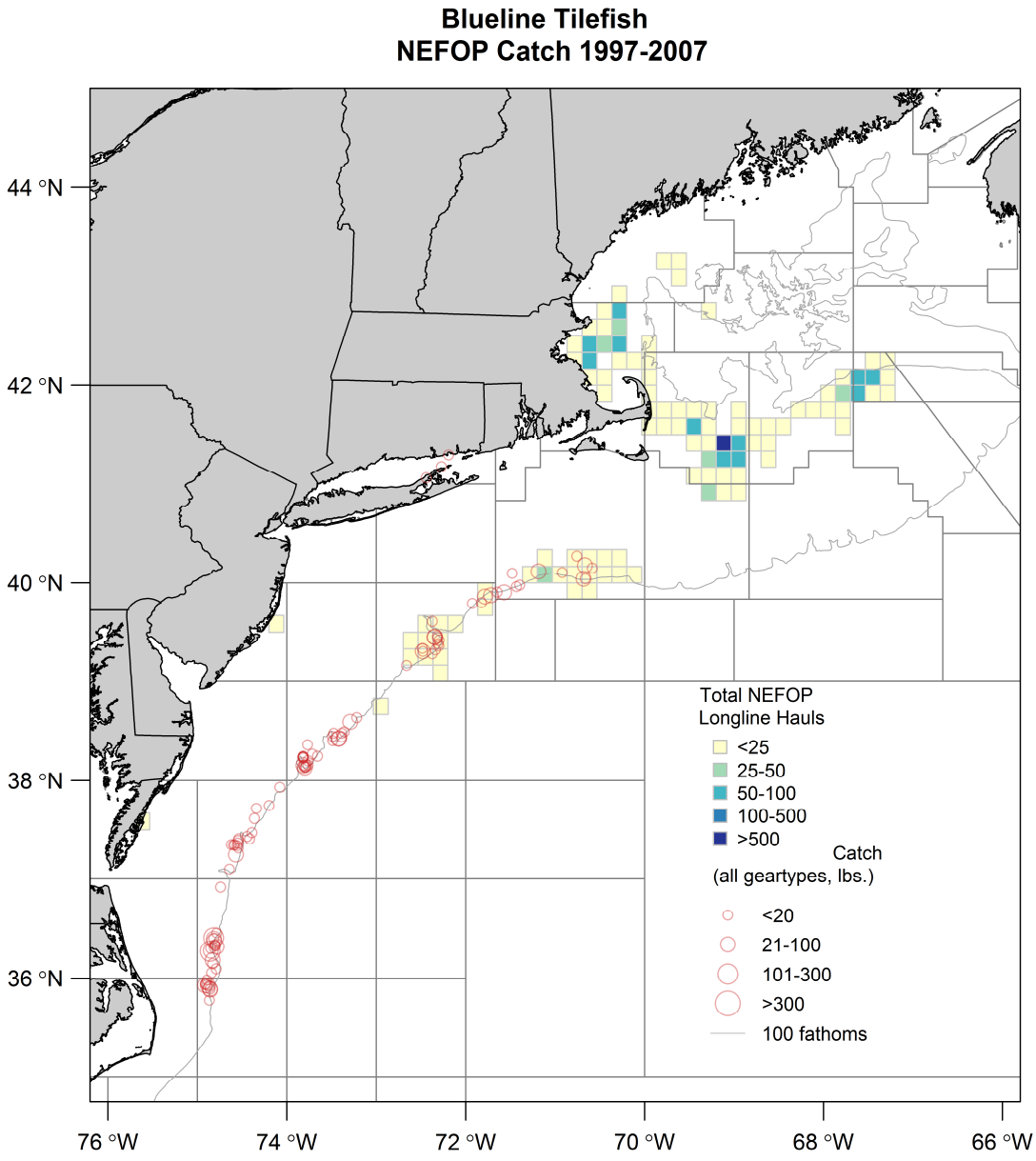


Figure 6. Blueline tilefish caught in pounds for NEFOP hauls for all gear types from 1997 to 2007. Total NEFOP longline effort (1997-2007) in total hauls is also shown by ten minute square.

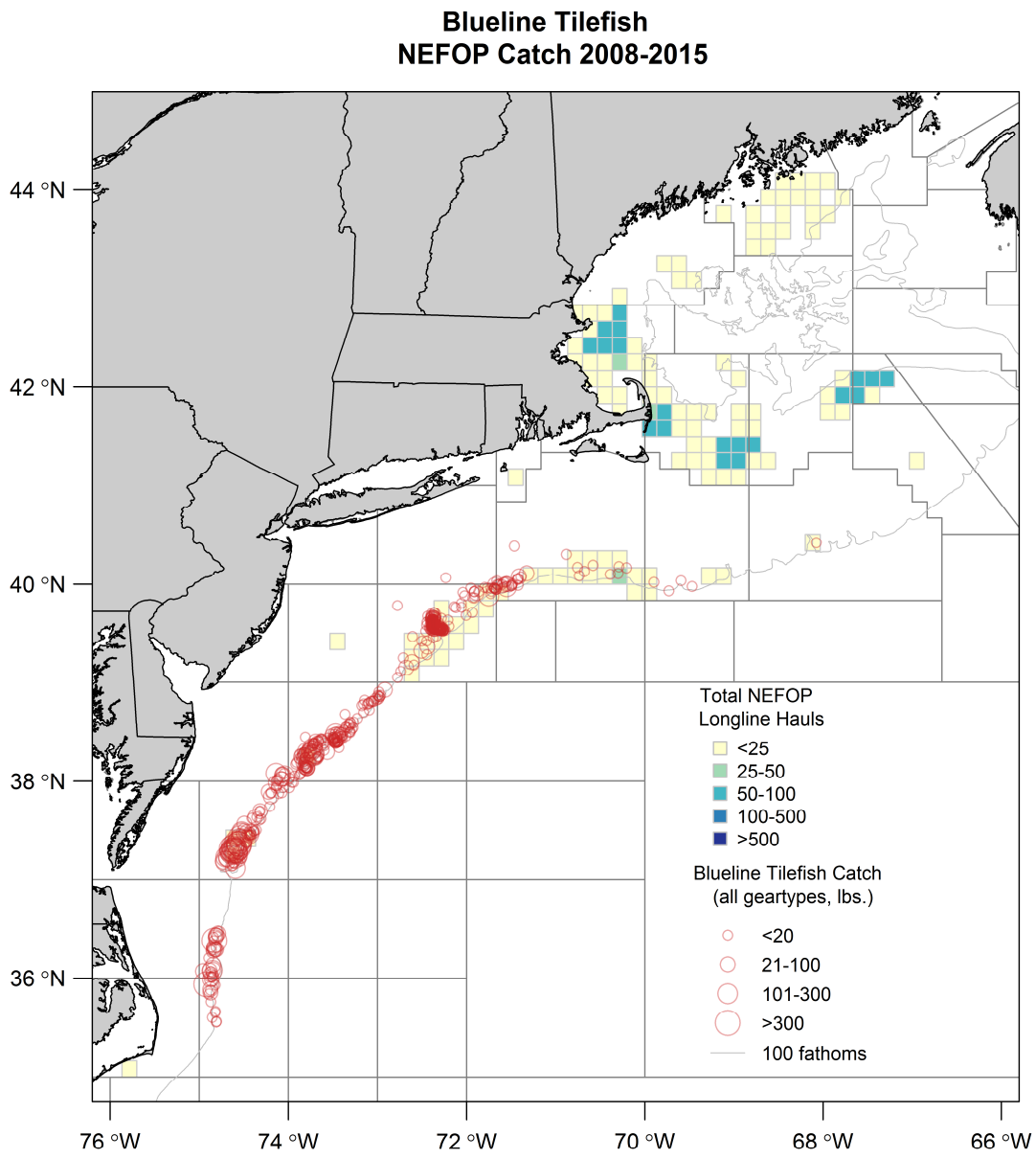


Figure 7. Blueline tilefish caught in pounds for NEFOP hauls for all gear types from 2008 to 2015. Total NEFOP longline effort (2008-2015) in total hauls is also shown by ten minute square.

Section B: Vessel Trip Report (VTR) data

A commercial species code for blueline tilefish was developed in 2001 with the implementation of the golden tilefish FMP. Before 2001 it is assumed that tilefish recorded under the tilefish "unclassified" code was comprised of most golden tilefish. Table 1 summarizes the landing reported in logbook VTR data. VTR data suggest most of the landings are being caught from statistical areas off North Carolina and from 626.

Table 1. VTR commercial blueline tilefish landing in pounds (top) and percent by statistical area (bottom) from 2002 to 2015. Highlighted cell represent the maximum within a year.

| Year | 626 | 636 | 635 | 632 | 621 | 622 | 616 | 631 | 625 | 537 | other | total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2002 | | 12,228 | 4,667 | 1,194 | | 28 | | 42 | | 3 | 39 | 18,201 |
| 2003 | 2,307 | 7,786 | 13,051 | 2,989 | | 236 | 5 | 27 | 31 | 1,950 | 320 | 28,702 |
| 2004 | 769 | 215 | 208 | 1,012 | | 449 | 581 | | 724 | 730 | 750 | 5,438 |
| 2005 | 511 | 2,135 | 20 | 52 | 18 | 63 | 210 | 2 | | 135 | 360 | 3,506 |
| 2006 | 558 | 9,007 | 126 | 621 | | 776 | 464 | 204 | | | 25 | 11,781 |
| 2007 | 12,000 | 1,800 | 243 | 4,469 | | 459 | 424 | 294 | | 129 | 85 | 19,903 |
| 2008 | 4,466 | 5,664 | 832 | 3,414 | 630 | 1,809 | 782 | | | 211 | 411 | 18,219 |
| 2009 | 2,529 | 11,581 | 111 | 492 | 13 | 117 | 1,038 | 318 | | 300 | 480 | 16,979 |
| 2010 | 3,110 | 52,189 | 8,750 | 4,874 | 300 | 602 | 944 | 25 | 8 | 415 | 354 | 71,571 |
| 2011 | 2,690 | 7,311 | 8,050 | 9,737 | 550 | 1,348 | 1,286 | 2,931 | | 31 | 874 | 34,808 |
| 2012 | 1,504 | 17,403 | 1,303 | 17,899 | 320 | 2,239 | 3,631 | 2,685 | | 336 | 456 | 47,776 |
| 2013 | 7,415 | 362 | 37,072 | 5,252 | 7 | 9,994 | 1,848 | 308 | | 997 | 1,092 | 64,347 |
| 2014 | 116,343 | 6,879 | 14,506 | 22,826 | 22,021 | 3,000 | 4,641 | | 5,417 | 87 | 224 | 195,944 |
| 2015 | 71,354 | 300 | 1,535 | 1,251 | 220 | 3,906 | 3,305 | 7 | 184 | 294 | 371 | 82,727 |

| Year | 626 | 636 | 635 | 632 | 621 | 622 | 616 | 631 | 625 | 537 | other |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2002 | 0% | 67% | 26% | 7% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| 2003 | 8% | 27% | 45% | 10% | 0% | 1% | 0% | 0% | 0% | 7% | 1% |
| 2004 | 14% | 4% | 4% | 19% | 0% | 8% | 11% | 0% | 13% | 13% | 14% |
| 2005 | 15% | 61% | 1% | 1% | 1% | 2% | 6% | 0% | 0% | 4% | 10% |
| 2006 | 5% | 76% | 1% | 5% | 0% | 7% | 4% | 2% | 0% | 0% | 0% |
| 2007 | 60% | 9% | 1% | 22% | 0% | 2% | 2% | 1% | 0% | 1% | 0% |
| 2008 | 25% | 31% | 5% | 19% | 3% | 10% | 4% | 0% | 0% | 1% | 2% |
| 2009 | 15% | 68% | 1% | 3% | 0% | 1% | 6% | 2% | 0% | 2% | 3% |
| 2010 | 4% | 73% | 12% | 7% | 0% | 1% | 1% | 0% | 0% | 1% | 0% |
| 2011 | 8% | 21% | 23% | 28% | 2% | 4% | 4% | 8% | 0% | 0% | 3% |
| 2012 | 3% | 36% | 3% | 37% | 1% | 5% | 8% | 6% | 0% | 1% | 1% |
| 2013 | 12% | 1% | 58% | 8% | 0% | 16% | 3% | 0% | 0% | 2% | 2% |
| 2014 | 59% | 4% | 7% | 12% | 11% | 2% | 2% | 0% | 3% | 0% | 0% |
| 2015 | 86% | 0% | 2% | 2% | 0% | 5% | 4% | 0% | 0% | 0% | 0% |

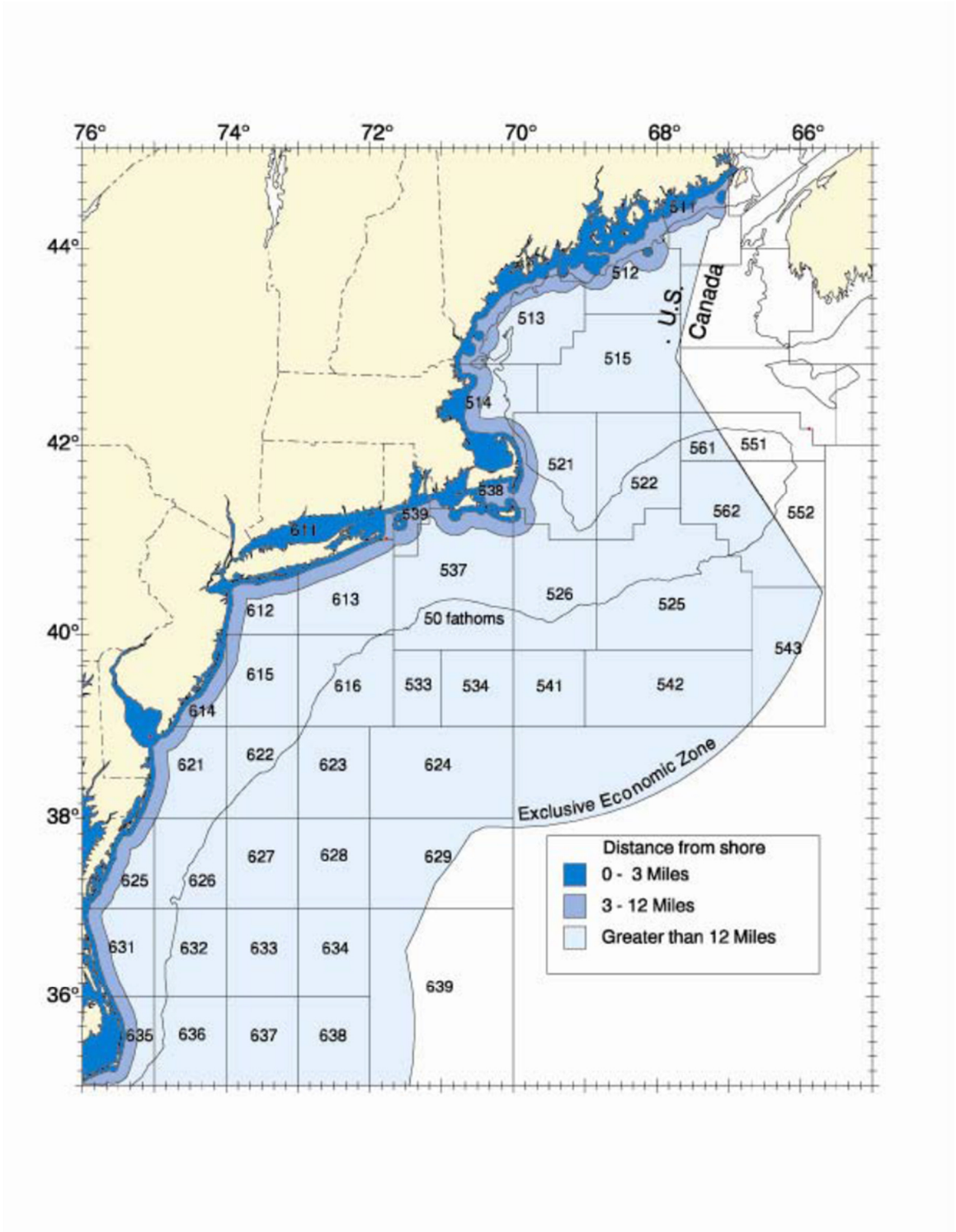


Figure 1. Statistical area used for reporting of the commercial catch.