#### Summary of Northeast Fisheries Science Center Blueline Tilefish Survey Data

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## Draft Working Paper on Summary of Northeast Fisheries Science Center Blueline Tilefish Survey Data



Photo Credit: Duane Raver, Jr.

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All NEFSC bottom trawl surveys catch very few blueline and golden tilefish (Table 1, Figures 2 to 5). Only 46 blueline tilefish were caught in the three NEFSC (fall, winter, spring) bottom trawl surveys. The 46 fish represent a relatively broad size distribution from 23 to 78 cms. Most of the 46 blueline tilefish were caught after 2000 north of Cape Hatteras (Table 1). Note that the two fish caught in 1982 were caught in strata off Cape Fear which were only sampled in the early 1980s. Strata south of Cape Hatteras to Cape Lookout are sampled in most years but are not as consistently sampled as the strata north of Cape Hatteras in both the spring and fall surveys. Most of the blueline tilefish in the surveys were caught in the deeper strata north of Cape Hatteras. Overall more golden tilefish were caught relative to the number of blueline tilefish caught. This difference may be a reflection of relative difference in population size rather than a difference in catchability between the two species. Comparisons of overall blueline and golden tilefish distributions shows that blueline tend to be distributed further south (south of Hudson Canyon) and appear to be slightly shallower relative to golden tilefish. When interpreting NEFSC spring and fall time series it is important to consider possible changes in survey catchability for tilefish due to changes in survey vessel, gear, and protocols in 2009. It is not clear whether these changes had an effect on tilefish catchability.

Year	Fall	Winter	Spring	Total
1982			<b>2</b> <sup>1</sup>	2
1991	1			1
1992				
1993				
1994	1 <sup>1</sup>			1
1995				
1996				
1997				
1998				
1999				
2000				
2001		1		1
2002		1		1
2003	7	4		11
2004	3			3
2005				
2006	5			5
2007	2	3		5
2008				
2009	1			1
2010			1	1
2011				
2012				
2013			6	6
2014	2			2
2015	4		2	6
Total	26	9	11	46

Table 1. Numbers of blueline tilefish caught in NEFSC bottom trawl surveys. The fall survey was conducted from 1967-2015 which included strata to Cape Hatteras, winter survey from 1992-2007, and spring survey from 1968-2015. Note- no fish were caught between 1982 and 1991.

<sup>1</sup> Strata south of Cape Hatteras



Figure 1. Size distributions of tilefish caught in the NEFSC fall, winter, and spring surveys.



Figure 2. Spatial distribution of blueline tilefish caught in the NEFSC fall and spring bottom trawl surveys.

#### Golden

### **Tilefish NEFSC Fall & Spring Surveys**



1968-2014

Figure 3. Spatial distribution of golden tilefish caught in the NEFSC fall and spring bottom trawl surveys.

# Golden

### **Tilefish NEFSC Fall Survey**



Figure 4. Spatial distribution of golden tilefish caught in the NEFSC fall bottom trawl survey.

# Golden





Figure 5. Spatial distribution of golden tilefish caught in the NEFSC spring bottom trawl survey.