## APPENDIX A
## Variables added to the NEFOP dataset

| Variable name | Variable description |
|---|---|
| BotTemp | climatological sea bottom temperature in degrees Celsius |
| btm_dpth | bathymetry from the National Geophysical Data Center's ETOPOv2; in negative meters; resolution 2 arc minute (~4 kilometers) |
| btm_slp | bottom slope |
| chl_final | chlorophyll *a* concentration in milligrams/cubic meter (post-1996 only) |
| chl_final_log10 | $\log_{10}$ of chl_final |
| closure_all | all closures and gear modification areas defined by the Harbor Porpoise Take Reduction Plan:[19] Cape Cod South, Cashes Ledge, Massachusetts Bay, Mid-Coast, New Jersey Mudhole, Northeast, Offshore, southern Mid-Atlantic, Waters off New Jersey<br><br>all closures defined by the Atlantic Large Whale Take Reduction Plan: Cape Cod Bay Critical Habitat Area, Great South Channel Critical Habitat Area |
| closure_ma | Mid-Atlantic closures from the Harbor Porpoise or Large Whale Take Reduction Plan |
| closure_ne | Northeast closures from the Harbor Porpoise or Large Whale Take Reduction Plan |
| d_b50 | distance in either direction from the 50-meter depth contour line; in meters; resolution 100 meters |
| d_b100 | distance in either direction from the 100-meter depth contour line; in meters; resolution 100 meters |
| d_b200 | distance in either direction from the 200-meter depth contour line; in meters; resolution 1000 meters |
| d_b500 | distance in either direction from the 500-meter depth contour line; in meters; resolution 1000 meters |
| d_coast | distance from the coast; in meters; resolution 1000 meters |
| dep_cr | bathymetry from the National Geophysical Data Center's Coastal Relief; in negative meters; resolution 3 arc second (~90 meters) |
| dep_srtm | bathymetry from the United States Geological Survey's SRTM30 v.1; in negative meters; resolution 30 arc second (~1000 meters) |
| final_asp | compass direction of surface temperature difference, providing an indication of oceanographic fronts |
| final_fnt | strength of surface temperature difference in degrees Celsius, providing an indication of oceanographic fronts |
| fshdiscliv | total live pounds of catch discarded on a haul |
| fshkeptliv | total live pounds of catch kept on a haul; kept = landed in port (post-2000) |
| gnArea | regions that correspond to regulations for gear restrictions in the Harbor Porpoise Take Reduction Plan. Regions are Gulf of Maine, waters off NJ, southern Mid-Atlantic, and southern New England (GOM, NJ, SMA, SNE). See Figure 3. |
| hailwtliv | hailwt converted from dressed to live weight. Differs from hailwt only if the dressed/round flag indicates a dressed weight (drflag = 1). |

[19] See http://www.nero.noaa.gov/prot_res/porptrp/finalrule.pdf for a map of closure areas.

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| nao | monthly mean NAO index |
| nao_1 | one-year lag of monthly mean NAO index |
| nao_2 | two-year lag of monthly mean NAO index |
| pingperc | percentage of active marine mammal deterrent devices on a net relative to how many should be on a net per regulations |
| r3nao | three-month running average of monthly mean NAO index |
| r3nao_1 | one-year lag of three-month running average NAO |
| r3nao_2 | two-year lag of three-month running average NAO |
| region | NEFSC study area divided into four regions: Gulf of Maine, Hudson Canyon, southern New England, and Mid-Atlantic (GOM, HUD, SNE, MAT). See Figure 3. |
| region2 | same as region but with HUD combined into SNE |
| sbt_diff | difference between sea surface and bottom temperature in degrees Celsius; calculated as wtmp minus BotTemp (see Appendix B for description of wtmp) |
| sbt_dpm | difference in sea surface and bottom temperature per meter; calculated as sbt_diff divided by depth (see Appendix B for description of depth) |
| sst_final | sea surface temperature in degrees Celsius; acquired from satellite data |
| wnao | winter NAO index (average of monthly mean NAO index for December through March) |
| wnao_1 | one-year lag of winter NAO index |
| wnao_2 | two-year lag of winter NAO index |