## **Supplementary Tables**

Before statistical analysis, data screening was necessary to remove longline sets that were likely to be reported inaccurately. The number of longline sets removed and the criteria used for data screening are presented below (Suppl. Table 1).

Many geographic-zone and regulatory-period groupings had fewer than 100 recorded captures (Suppl. Tables 2 and 3). Accordingly, to examine interaction effects

of blue sharks (*Prionace glauca*), we used reduced models that included only groupings with greater than 100 individuals. For blue sharks, we excluded 2 geographic zones from our analysis: tuna south and Gulf of Mexico (Suppl. Table 2). For tiger sharks (*Galeocerdo cuvier*), a model without interaction effects and with the full data set was superior to a model in which groupings with less than 100 individuals were removed and included an in-teraction effect.

## Supplementary Table 1

A summary of data screening completed on data of blue and tiger sharks in the U.S. Atlantic pelagic longline fishery for the period 1992–2008. Numbers in the first 2 rows reflect the counts of longline sets examined. Subsequent rows reflect the number of individual sharks examined.

Species	Blue shark	Tiger shark
Total longline sets	209,696	209,696
Total number of longline sets after sets that did not report catching the species examined were removed	49,296	14,089
Total number of individual sharks from the species examined caught (all longline sets)	863,153	33,072
After longline sets that retained the species examined were removed	848,960	26,317
After longline sets that recorded a sea-surface temperature of 0°C were removed	848,157	26,302
After longline sets that recorded no sea-surface temperature were removed	828,845	24,607
After longline sets that recorded all latitudes and longitudes as 0° were removed	828,748	24,532
After longline sets that had missing latitude or longitude values were removed	827,054	24,392
After longline sets with an eastern longitude were removed	819,603	24,392
After longline sets that targeted sharks were removed (these longline sets were not removed for blue shark)	819,503	15,76
After individuals with a capture location outside of the designated geographic zones were removed	819,503	15,767
After individuals caught on longline sets that did not target tunas, swordfish, sharks, or dolphinfish were removed	810,084	15,569
After individuals caught with an improbable sea-surface temperature were removed (<1°C)	810,021	15,560
After groupings with less than 100 individuals were removed	806,598	15,474