

Supplement S2: Supplementary Figures

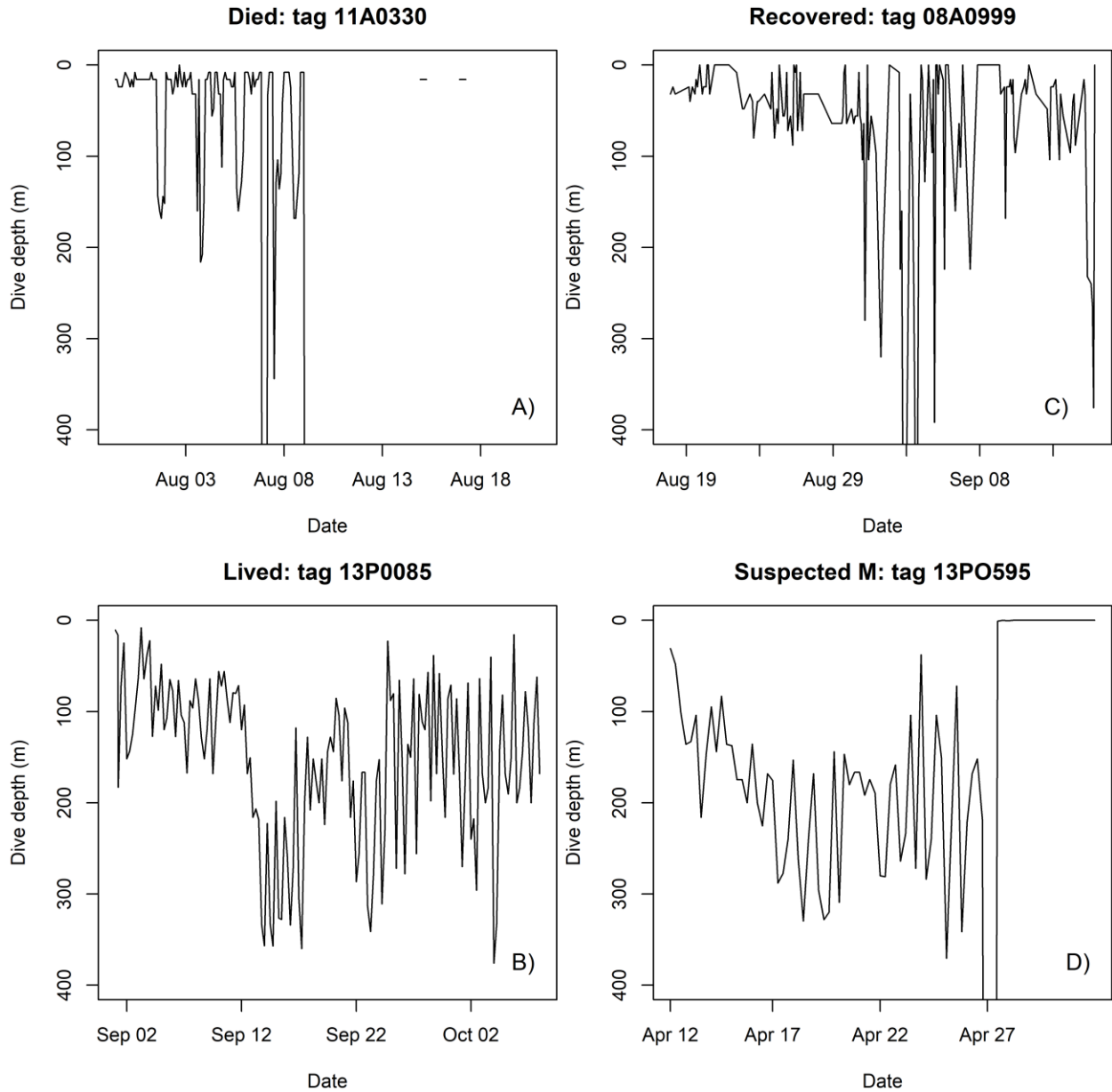


Figure S1. A comparison of depth recordings from individual shortfin mako with different fates: died (A), lived (B), recovered (C) and suspected natural mortality (D), plotted over comparable timeframes. Note that the animal that lived (tag 13P0085) and the animal that recovered (tag 08A0999) were monitored over a much longer duration than indicated in the figure (Supplement S1). Similarly, the maximum depths recorded when an individual died from capture and handling (tag 11A0330) or suspected natural mortality (tag 13PO595) were > 1200 m and not shown here.

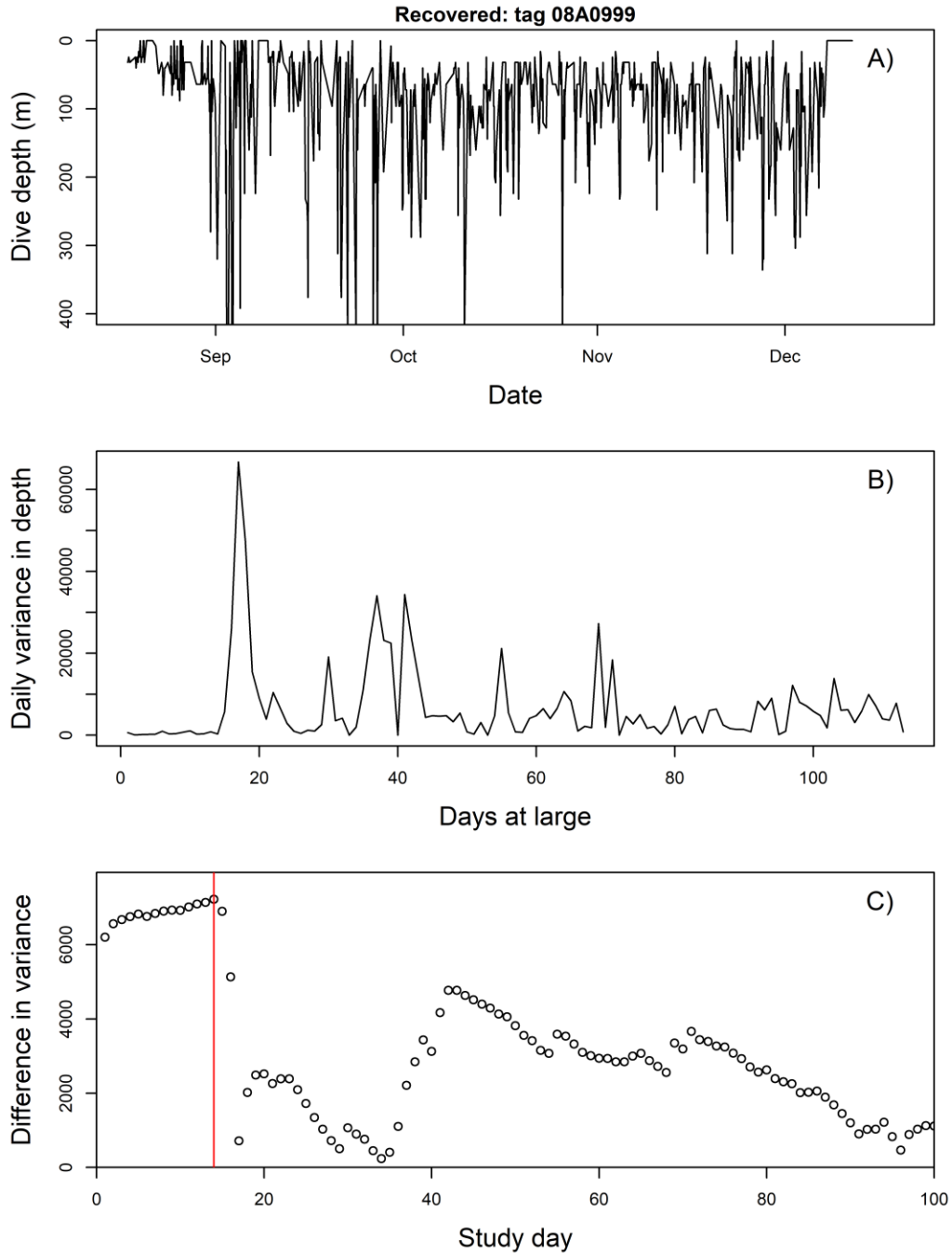


Figure S2. A detailed example of the delineation of the recovery period for tag 08A0999. Unlike in Figure S1, the entire dive track is shown (A). Daily dive variance (B) was initially used to identify individuals that exhibited a recovery period. The duration of the recovery period (vertical line) was defined as the day with the maximum difference between variance at the start vs the remainder of the deployment (C). Here, average variance on days 1-14 was the most different from days 15 onward.

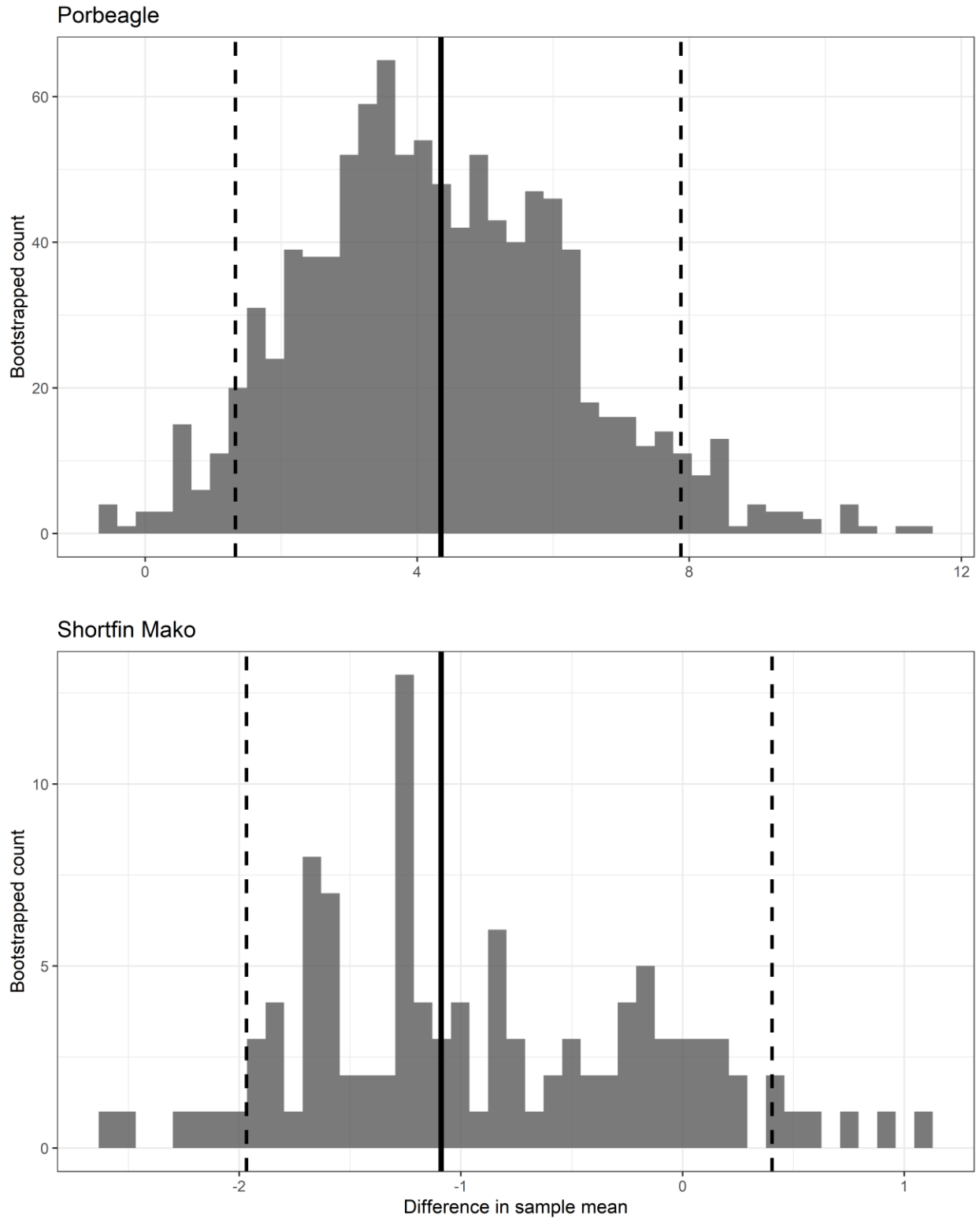


Figure S3. Bootstrapped distributions for the difference between juvenile and adult recovery times for porbeagle (top panel) and shortfin mako (lower panel). The median (solid line) and 95% confidence interval (dashed lines) are shown. A positive difference indicates that mean recovery time was greater for juveniles.

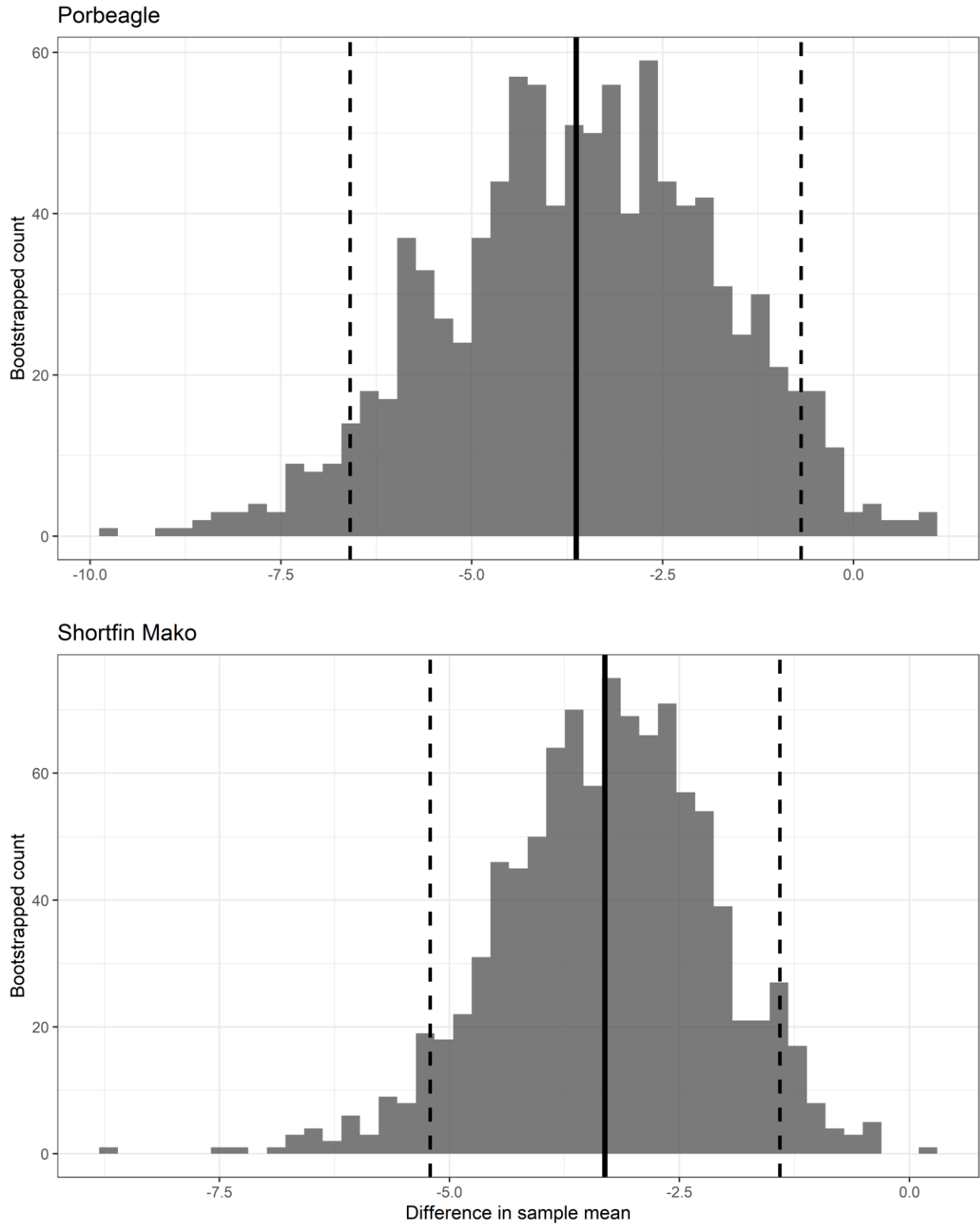


Figure S4. Bootstrapped distributions for the difference between recovery times for individuals tagged in water relative to those tagged onboard a vessel for porbeagle (top panel) and shortfin mako (lower panel). The median (solid line) and 95% confidence interval (dashed lines) are shown. The negative difference indicates that individuals recovered faster when tagged in water.

Shortfin Mako

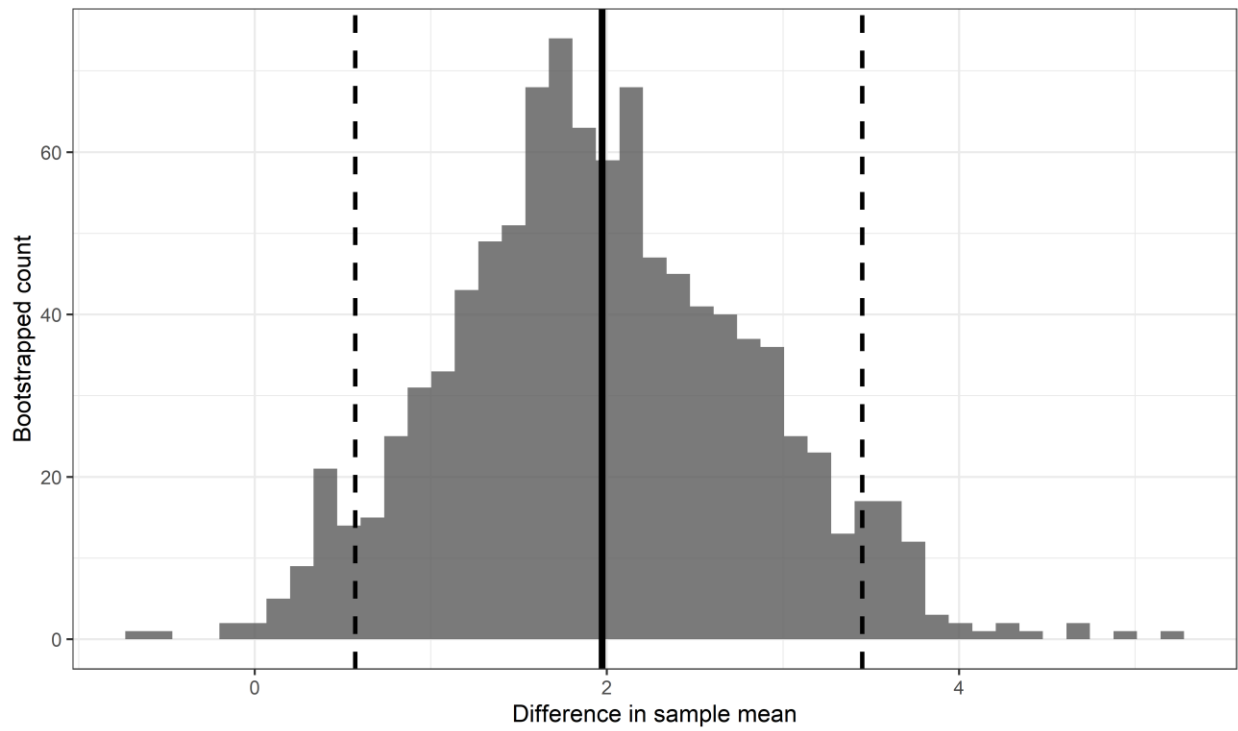


Figure S5. Bootstrapped distribution for the difference between recovery times for individuals caught on circle hooks for shortfin mako. The median (solid line) and 95% confidence interval (dashed lines) are shown. A positive difference indicates that mean recovery time was greater when caught using circle hooks.

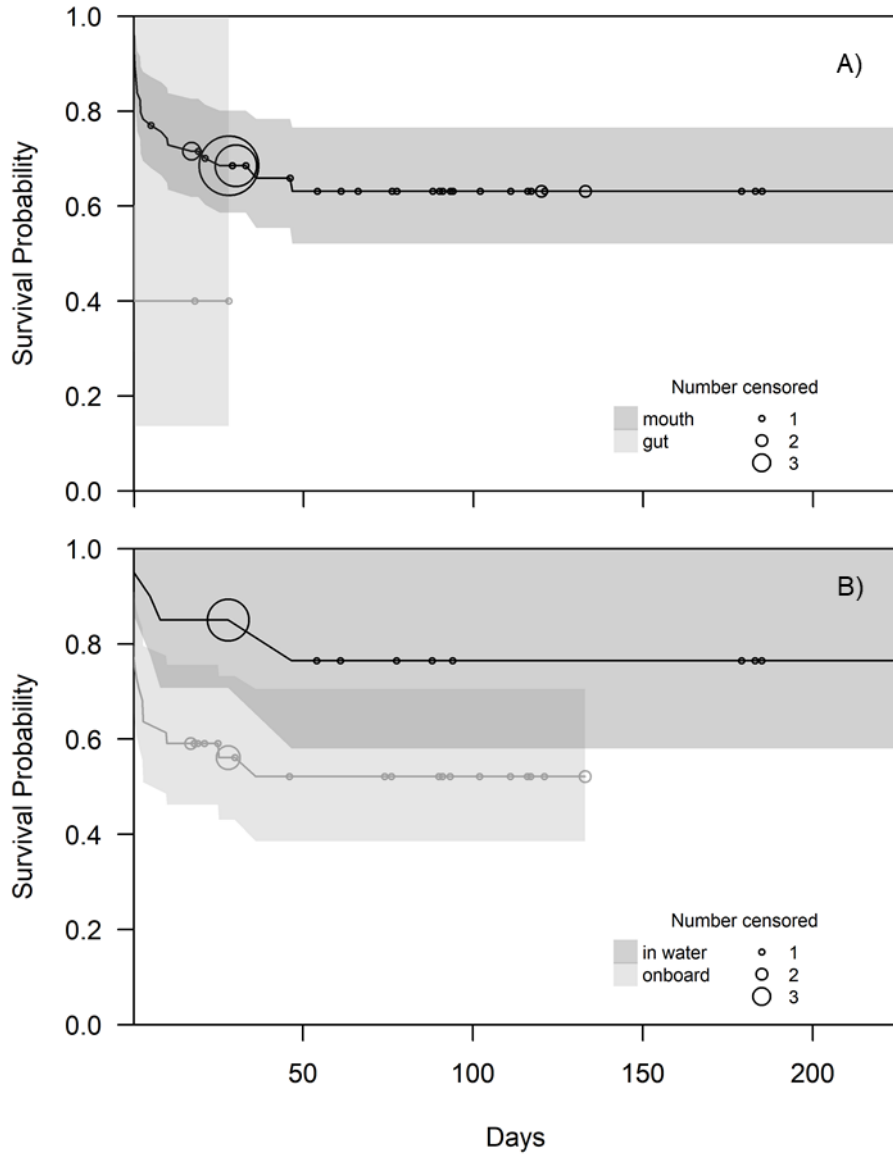


Figure S6. Cox proportional hazard model estimates (lines) and 95% confidence intervals (shaded bands) for the survivorship of shortfin mako sharks (a) hooked in the mouth (black line; dark grey band) or hooked in the gut (grey line; light grey band), and (b) tagged in water (black line; dark grey band) or tagged onboard (grey line; light grey band). The circles represent right-censoring times, with the size of the circle indicating the number of censored observations.

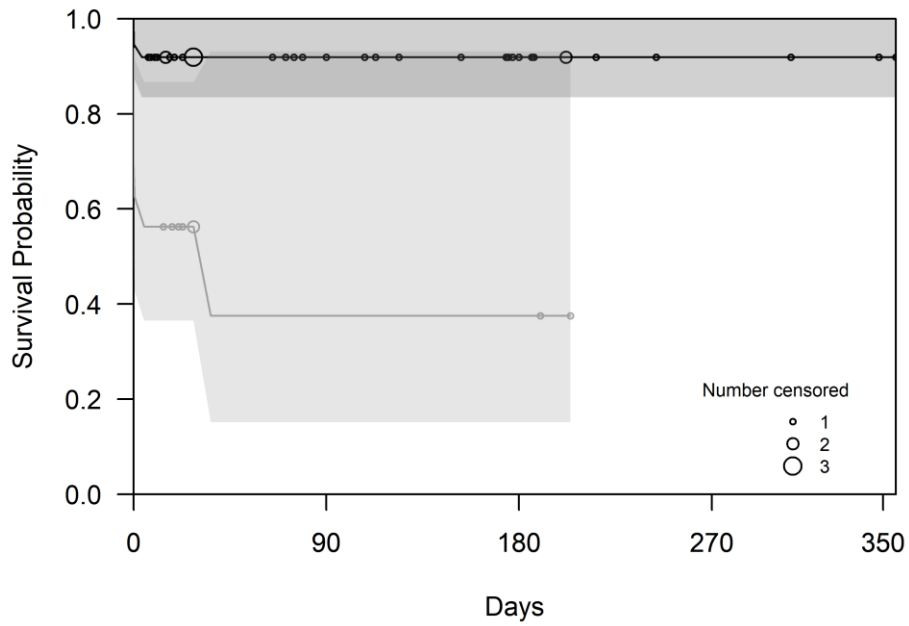


Figure S7. Cox proportional hazard model estimates (lines) and 95% confidence intervals (shaded bands) for the survivorship of porbeagle sharks hooked in the mouth (black line; dark grey band) and foul hooked, including in the gut (grey line; light grey band). The circles represent right-censoring times, with the size of the circle indicating the number of censored observations.