

Fig. S1. Vertical speed time traces of dive fragments with varying length from one individual (seal ID92574). Each time series displays the vertical speeds of dive fragments that were longer than either (0) zero minutes; (1) one minute; (2) two minutes; (3) three minutes; (4) four minutes; (5) five minutes; (6) six minutes; (7) seven minutes; (8) eight minutes; (9) nine minutes; (10) ten minutes; (11) eleven minutes; (12) twelve minutes; (13) thirteen minutes; (14) fourteen minutes; or (15) fifteen minutes. Smooth splines, represented by blue lines, were fitted to each time series to detect any apparent trend in the underlying data (see Materials & Methods). Splines fitted to time series of vertical speeds from longer dive fragments, e.g. longer than eight minutes, showed an improved fit.

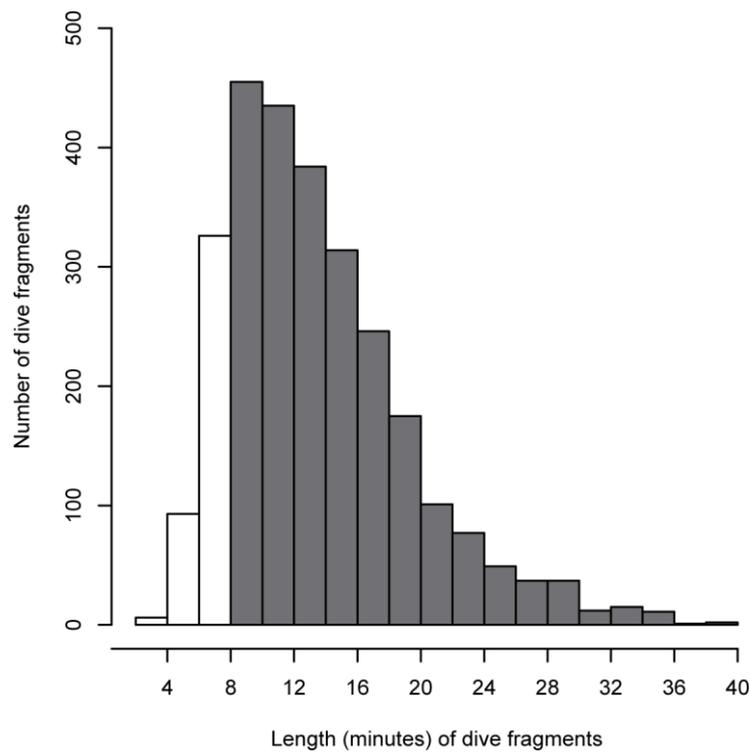


Fig. S2. Frequency histogram of the length of dive fragments. The dive fragments shaded in grey fulfilled all of the seven selection criteria of the step-wise filtering method and were therefore considered to be drift fragments. The dive fragments shaded in white were those that were discarded by selection criterion (3) because these dive fragments were shorter than the chosen minimum fragment length of eight minutes. The histogram demonstrates that most dive fragments under consideration were equal or longer than eight minutes.