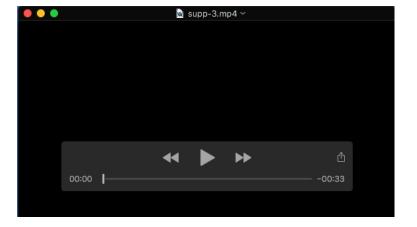
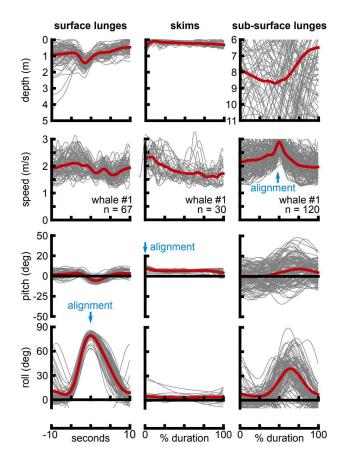


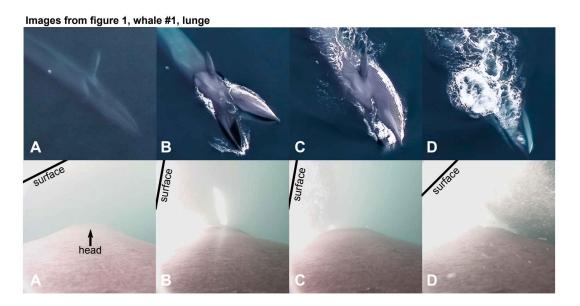
**Movie 1:** A sei whale performs a non-feeding surfacing, a surface lunge, and a skim-feeding event. The surface lunge and skim are the sequences shown in Figure 1.



**Movie 2:** A sei whale performs a surface lunge. The surface lunge is the sequence shown in Figure 2.



**Figure S1.** Sei whale surface lunges were characterized by rightward rolls, slow speeds, and little dropoff in speed during filtration. 67 surface lunges performed by a single whale (individual #1) are shown, aligned at the time of maximum roll. Sei whale surface skim-feeding events were characterized by slow speeds, extended periods at the surface, and a slightly upward pitch angle. 30 skims performed by a single whale are shown, aligned at the time when the whale first breaks the surface and scaled to a normalized duration. Sub-surface lunges are similar to lunges performed by other rorqual whales, with high speeds, a distinct acceleration and deceleration phase, and variable roll, pitch, and depth. 120 sub-surface lunges performed by a single whale are shown, aligned at the time of maximum speed.



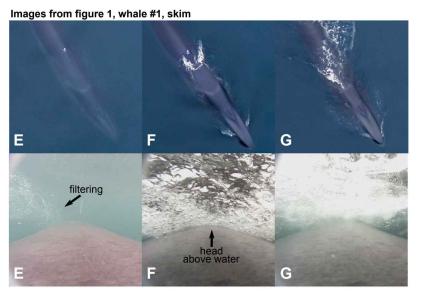




Figure S2. Enlarged photographs from Figure 1 and Figure 2.

Table S1. Raw data used to create Table 1.

Click here to download Table S1