

Supplementary Data 5

Supplementary Data 5) Table of parameters for the estimation of the drag force a single seal louse, *E. horridus*, is exposed on the surface of a swimming seal.

Symbol	Parameter	Value	Unit
v	Swimming speed (seal)	4.9	m/s
S	Flow resisting area (<i>E. horridus</i>)	1.17809E-06	m ²
C_d	Drag coefficient (sphere)	0.0024	
ρ	Fluid density (water)	1000	kg/m ³
D	Drag force	0.03394	mN
F	Attachment force (<i>E. horridus</i>)	60.23	mN
	Attachment force/drag force	1774.60224	

The attachment force of *E. horridus* on seal fur is 1775 times stronger than the drag force generated at the most exposed area of the seal at a swimming speed of 4.9 m/s.