

**Supplementary table 1:** Samples sizes of fish that were used from each population over the course of the experiment. *N<sub>all measurements</sub>* refers to fish that completed aerobic physiology and immunocompetence experiments at all testing temperatures (i.e., 27, 28.5, 30, and 31.5°C), in addition to having tissue and blood samples collected at the conclusion of the experiment.

<i><b>Population</b></i>	<i><b>Latitude</b></i>	<i><b>N</b></i>	<i><b>N<sub>all measurements</sub></b></i>
Sudbury Reef	Low-latitude	11	9
Tongue Reef	Low-latitude	8	6
Vlassof Cay	Low-latitude	10	6
Cockermouth Island	High-latitude	10	8
Keswick Island	High-latitude	6	4
Chauvel Reef	High-latitude	10	5
<i><b>Total</b></i>		<i><b>55</b></i>	<i><b>38</b></i>