

**Supplementary table 2:** Samples sizes of fish that were used from each population over the course of the experiment.  $N_{all \text{ measurements}}$  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.

<b><i>Population</i></b>	<b><i>Latitude</i></b>	<b><i>N</i></b>	<b><i>N<sub>all measurements</sub></i></b>
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
<b><i>Total</i></b>		<b><i>55</i></b>	<b><i>38</i></b>