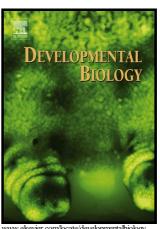
Author's Accepted Manuscript

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vier.com/locate/developmentalbiolo

PII: S0012-1606(18)30074-5

https://doi.org/10.1016/j.ydbio.2018.04.017 DOI:

Reference: YDBIO7745

To appear in: Developmental Biology

Received date: 29 January 2018 Revised date: 9 April 2018 Accepted date: 23 April 2018

Cite this article as: Julius A. Tabin, Ariel Aspiras, Brian Martineau, Misty Riddle, Johanna Kowalko, Richard Borowsky, Nicolas Rohner and Clifford J. Tabin, Temperature preference of cave and surface populations of Astvanax mexicanus, Developmental Biology, https://doi.org/10.1016/j.ydbio.2018.04.017

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ACCEPTED MANUSCRIPT

Temperature preference of cave and surface populations of *Astyanax mexicanus*

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ABSTRACT

Little is known about the genetic basis of behavioral choice, such as temperature preference, especially in natural populations. Thermal preference can play a key role in habitat selection, for example in aquatic species. Examining this behavior on a genetic level requires access to individuals or populations of the same species that display distinct temperature preferences. Caves provide a uniquely advantageous setting to tackle this problem, as animals colonizing caves encounter an environment that generally has a different, and far more stable, annual temperature than what is encountered on the outside. Here, we focus on cave and surface populations of *Astyanax mexicanus*, the Mexican tetra, and examine temperature preference and strength of temperature preference (reflected in the percent of time spent at the optimal temperature). We used a tank with a stable temperature gradient and

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