Evolutionary bistability of life history decision in male masu salmon.

Junnosuke Horita , Yoh Iwasa , Yuuya Tachiki

PII: S0022-5193(18)30168-1
DOI: 10.1016/j.jtbi.2018.04.008
Reference: YJTBI 9423

To appear in: *Journal of Theoretical Biology*

Received date: 18 October 2017
Revised date: 13 February 2018
Accepted date: 5 April 2018

Please cite this article as: Junnosuke Horita , Yoh Iwasa , Yuuya Tachiki , Evolutionary bistability of life history decision in male masu salmon., *Journal of Theoretical Biology* (2018), doi: 10.1016/j.jtbi.2018.04.008

Highlights

- In masu salmon, large male juveniles stay in streams; small ones migrate to ocean.
- We studied population dynamics when juvenile growth is suppressed by residents.
- Resident population may show equilibrium, cycle with many years, and chaos.
- We examined the evolution of threshold by calculating selection gradient.
- Evolutionary bistability exists; one with stable dynamics, and the other with cycle.