

Periodic Growth Rate and Periodic Carrying Capacity in the Beverton–Holt Population Model

Martin Bohner

Missouri S&T
400 West 12th Street
Rolla, MO 65409-020, USA
bohner@mst.edu
<http://mst.edu/~bohner>

We consider the Beverton–Holt population model and let both the carrying capacity and the inherent growth rate vary periodically. Versions of two so-called Cushing–Henson conjectures are presented. Dynamic analogues of the Beverton–Holt equation are considered, on arbitrary periodic time scales and also on the quantum time scale.

- [1] Bohner, Martin and Warth, Howard, The Beverton–Holt dynamic equation, *Applicable Anal.* 86(8), 1007–1015, (2007).
- [2] Bohner, Martin and Chieochan, Rotchana, The Beverton–Holt quantum difference equation, *J. Biol. Dyn.* 7(1), 86–95, (2013).
- [3] Bohner, Martin and Streipert, Sabrina, The Beverton–Holt equation with periodic growth rate, *Int. J. Math. Comput.* 26(4), 1–10, (2015).