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Youssef Naim Raffoul* (youssef.raffoul@notes.udayton.edu), Department of Mathematics, University of Dayton, OH 45469-2316, and Joan Hoffacker, Department of Mathematical sciences, Clemson, SC 29634. Positive periodic solutions of functional differential equations on time scales and population models.

In this paper, we employ Krasnosel'skii's fixed point theorem for cones to study the existence of positive periodic solutions to a system of infinite delay equations, $x^{\Delta}(t) = A(t)x^{\sigma}(t) + f(t, x_t)$ We give two general theorems and establish new periodicity conditions for several population growth models.

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