1011-34-377 Bonita A. Lawrence* (lawrence@marshall.edu), Marshall University, Department of Mathematics, One John Marshall Drive, Huntington, WV 25755-2560, and Basant Karna (karna@marshall.edu), Marshall University, Department of Mathematics, One John Marshall Drive, Huntington, WV 25755-256. An Existence Result for a Multi-Point Boundary Value Problem on a Time Scale. Preliminary report.

Utilizing the work of Krasnosel'skii and Zabreiko we can verify the existence of nontrivial solutions to the second order boundary value problem

$$y^{\Delta\Delta} + f\left(y^{\sigma}\right) = 0$$

with three point boundary conditions

$$y(0) = 0,$$

 $y(p) - y(\sigma(1)) = 0,$

defined on a time scale \mathbb{T} such that $t \in \mathbb{T} \cap [0, 1]$ and 0 . The goal of this work is to expand this result to multi-point boundary value problems. (Received August 30, 2005)