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Jim M Cushing* (cushing@math.arizona.edu), Department of Mathematics, 617 N Santa Rita, University of Arizona, Tucson, AZ 85721, and **Shandelle M Henson**. *High dimensional semelparous Leslie models.*

For lower dimensions, the dynamics of semelparous Leslie models as R_0 increases through 1 is now well understood. A dynamic dichotomy between equilibration with overlapping generations and synchronized periodic oscillations with non-overlapping generations results from the transcritical bifurcation that occurs at $R_0 = 1$. However, for higher dimensional semelparous Leslie models (which corresponds to longer maturation periods) less is known. I will give newly derived conditions for the stability and instability of the bifurcating equilibria for models of arbitrary dimension. In addition, I will give some results concerning the synchronized oscillations that also arise at bifurcation. (Received September 21, 2011)