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Katherine J. Meyer* (meyer2098@umn.edu), 127 Vincent Hall, 206 Church St. SE, Minneapolis, MN 55455. *Potential Quantitative Meanings of Resilience.*

Promoting a natural system's resilience—broadly defined as its ability to retain basic structure and function in the face of change—has emerged as an important goal in natural resource management. What does resilience mean from a mathematical viewpoint? The description above leaves room for multiple quantitative interpretations. After reviewing some of these from the ecological literature, I will present a mathematical method for characterizing resilience to repeated, discrete state variable perturbations in models based on ordinary differential equations. (Received August 06, 2015)