Dissertation Introduction

Although the concept of the ecological network, or “tangled bank,” dates back to Darwin (1859), it was almost a century later that ecologists began to rigorously explore the effects that interaction network structure can have on ecological dynamics (MacArthur 1955). The network approach facilitates the study of complex relationships among discrete components, and as community ecology focuses on interactions among multiple species, network thinking has contributed significantly to our understanding of complex ecological patterns and dynamics (Borrett et al. 2012), such as: community stability (May 1972, Cohen et al. 1981, Schmitz et al. 2010), ecosystem development (Ulanowicz 1981), and indirect interactions (Patten and Higashi 1991).