The term “ecosystem” is a metaphor that is meant to represent the people, practices, values, and technology involved in an information or data system. However, the use of the terms “ecosystem” or “ecology” to describe information and data systems has been critiqued for lack of theoretical development and misapplication of the concepts. This paper examines and critiques the implications of the data turn for library and information professionals and specifically focuses on the ecosystems metaphor as it is applied to data systems and data-intensive scholarship. Alternative approaches are proposed for framing and analyzing data and emergent data systems by engaging with critical data studies.