

Title:

Big data in ecology: using the COMPADRE database of plant matrix population models to discover what makes plant populations tick and how to manage them

Abstract:

Plant populations contribute to human wellbeing and survival. Understanding the persistence, variability and vulnerability to change of plant populations worldwide is important for predicting when and where ecosystem functions that contribute to our food, shelter and clean water will continue to operate in a time of rapid environmental change. The largest and most consistent source of information we have on how survival, growth and reproduction contribute to plant population dynamics is the recently launched COMPADRE plant matrix database. I will introduce COMPADRE and describe how we are using it to shed light on the persistence of plant populations worldwide and how to manage them.