ABSTRACT

The storage of carbon in Earth's forests provides an exciting opportunity to offset anthropogenic increases in atmospheric [CO2]. Climate impacts carbon sequestration and storage by moderating rates of plant growth and decay. Similarly, disturbance through wildfire can impact carbon dynamics through direct consumption of vegetation or indirectly by selecting for specific vegetation communities that sequester more or less carbon. Given this, knowledge of the synergistic impacts of climate and fire disturbance is required to accurately predict carbon loads in current landscapes and under future [CO2] emission scenarios. In this talk, I will overview the great research done by my colleagues (and I) on carbon, climate and wildfire interactions in the Sydney Basin. The research ultimately aims to predict future carbon losses/gains under varying climate change scenarios.

BIOGRAPHY

Chris is a postdoctoral research fellow at the University of Wollongong. He did his Ph.D. at Western Sydney University in terrestrial ecology and trophic cascade theory. His current work focuses on fire ecology and conservation biology.