



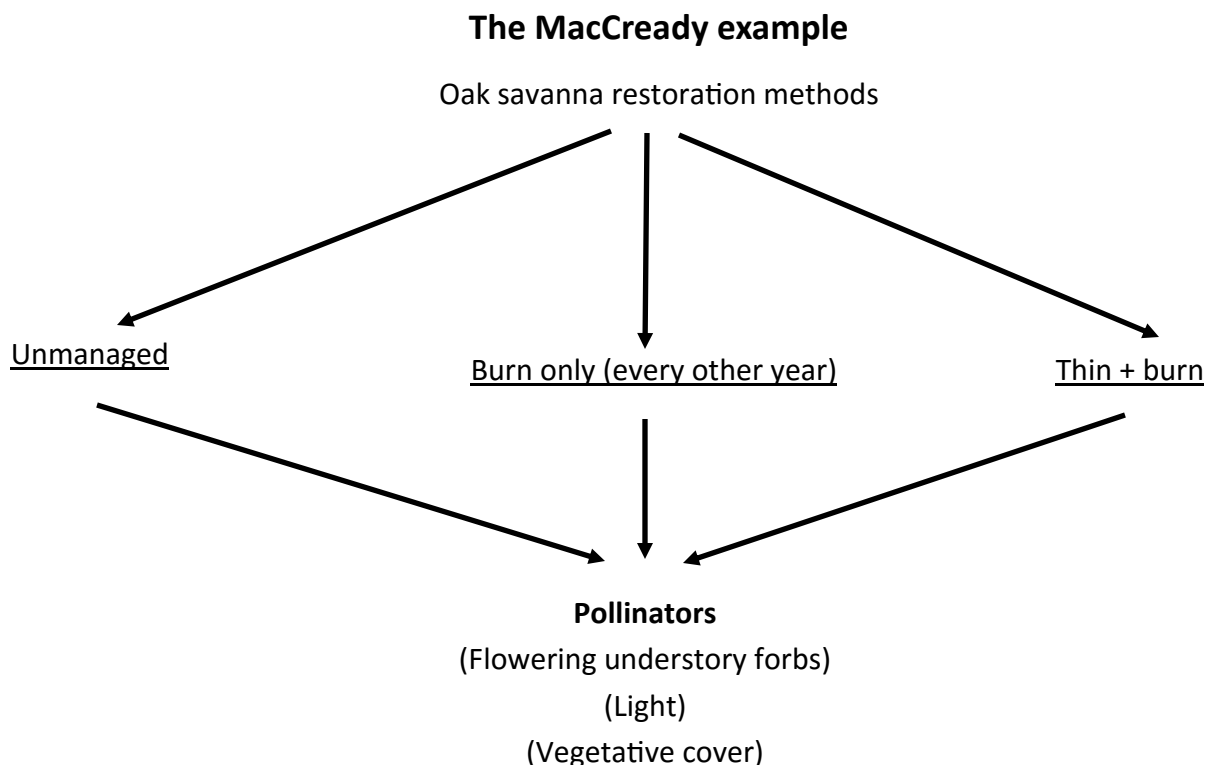
Research and Restoration in Oak Savanna at MSU MacCready Reserve

Pollinator response to restoration – floral faunal interactions

(Lettow, Brudvig, Landis)

Guiding Questions

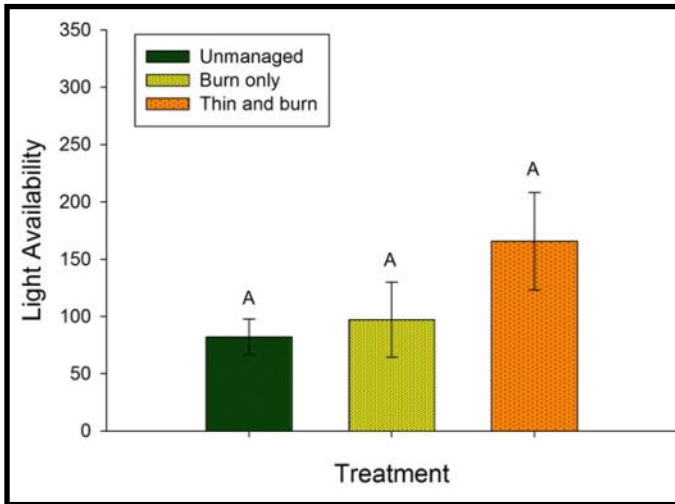
- What biological indicators do we as land managers use to gauge restoration success (e.g. oak regeneration, plant diversity, bird diversity, invasives, etc.)?
 - * Do indicators support/indicate success of other biological groups?
 - * Are indicator groups driving our management methods?
 - * What does our monitoring look like to detect these groups?
- Are pollinators considered when making management decisions?
- What features of managed oak systems are likely to support pollinators?
- Are pollinators critical to the success of our habitat restoration or other target groups?
- Is management for pollinators compatible with other habitat objectives?



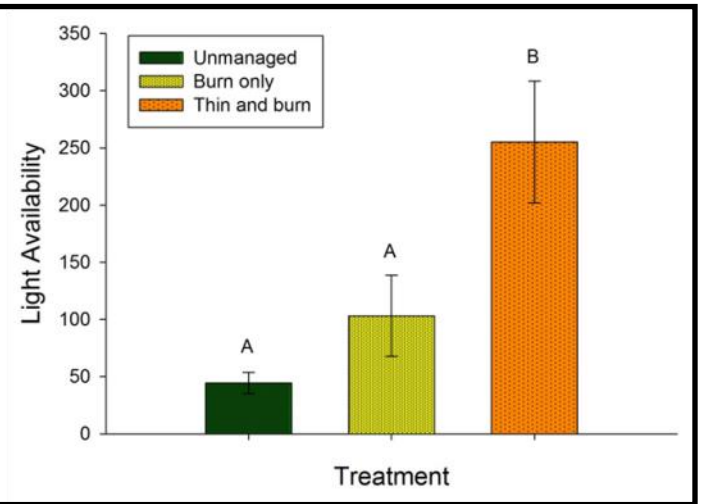


Habitat results

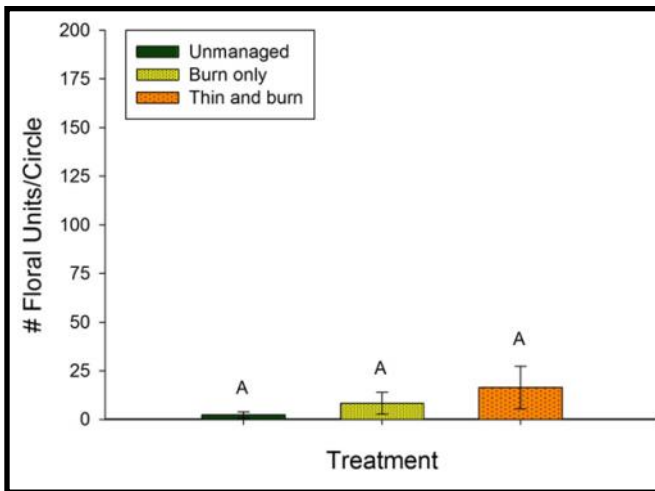
2011 Light Availability



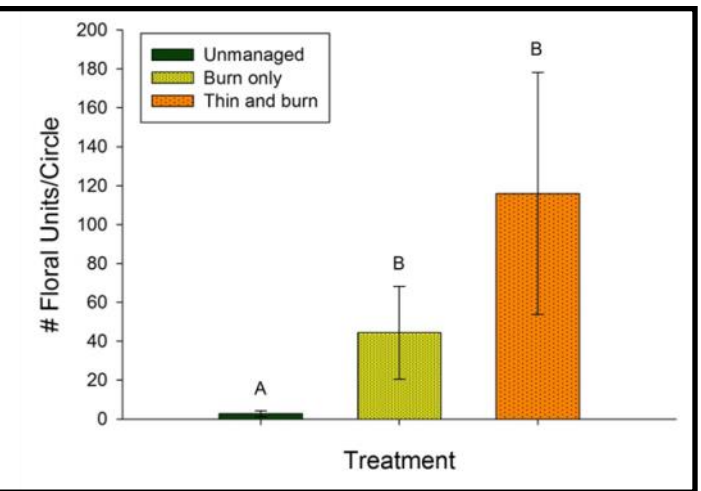
2012 Light Availability



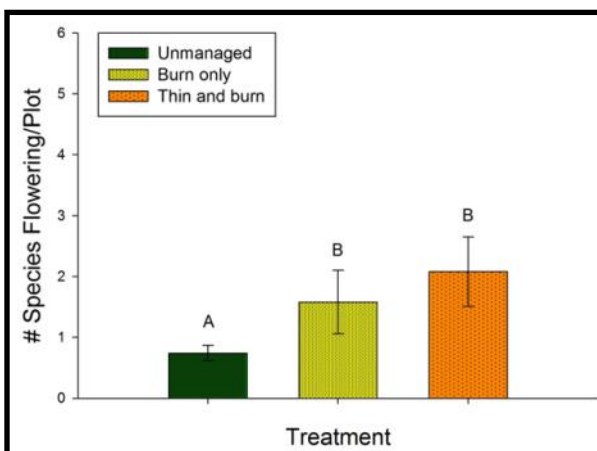
2011 Floral Abundance



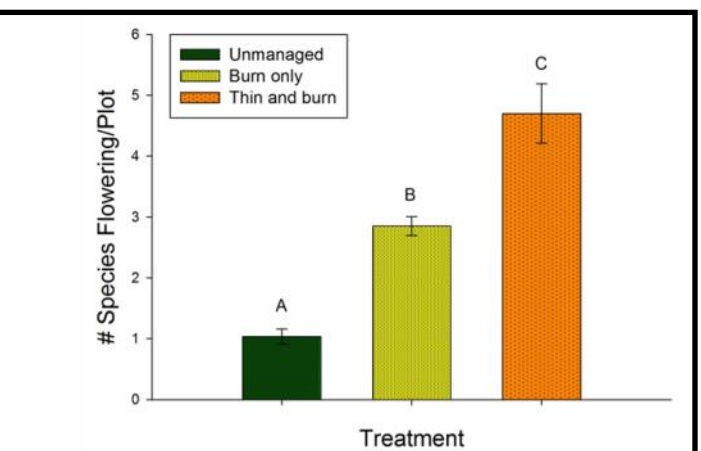
2012 Floral Abundance

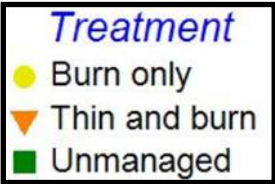


2011 Floral Richness



2012 Floral Richness

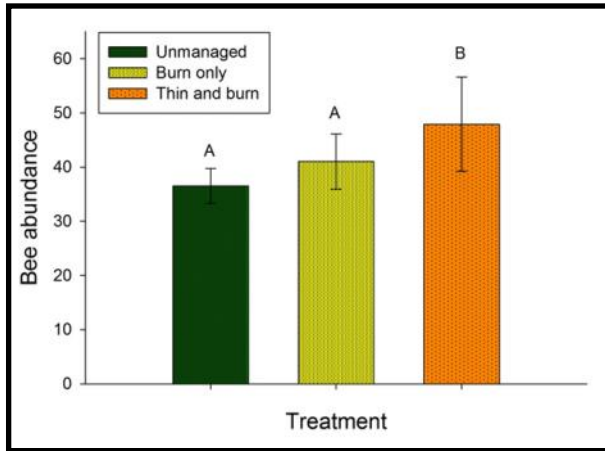




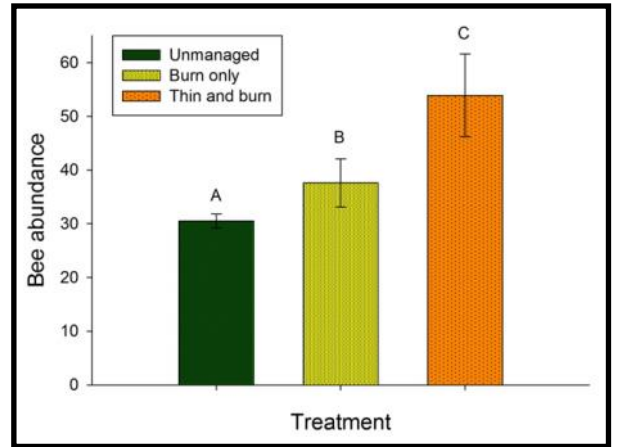
Bee diversity results



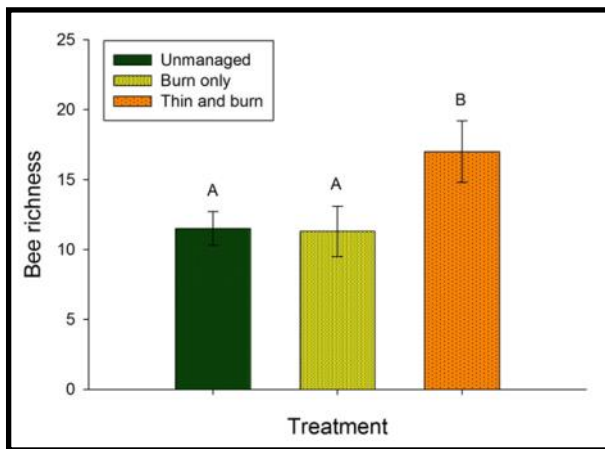
2011 Bee abundance



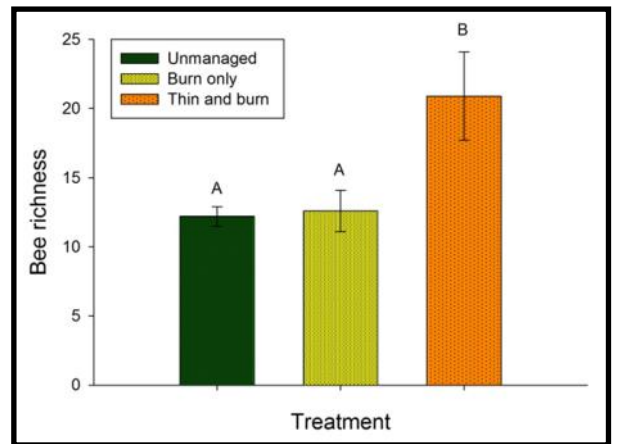
2012 Bee abundance



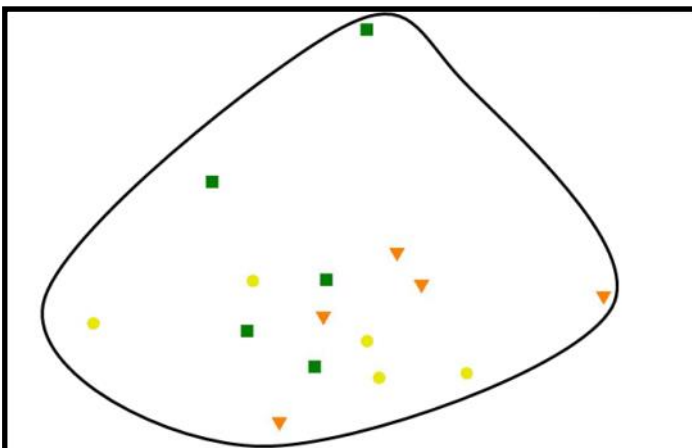
2011 Bee richness



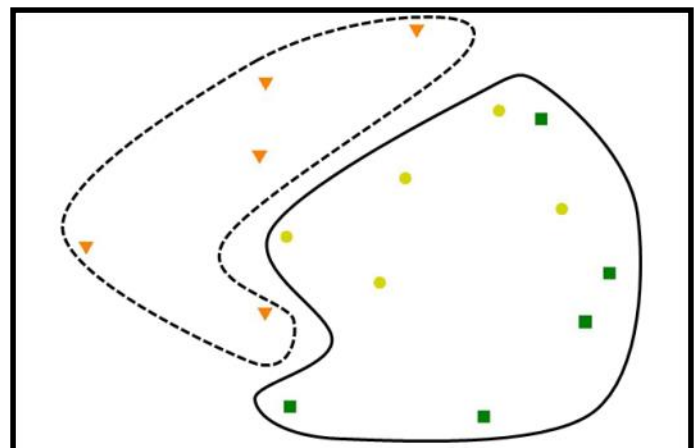
2012 Bee richness



2011 Bee communities



2012 Bee communities



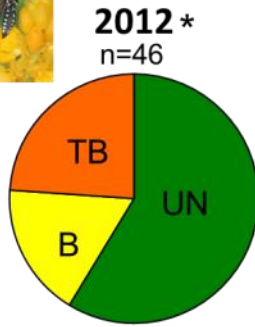
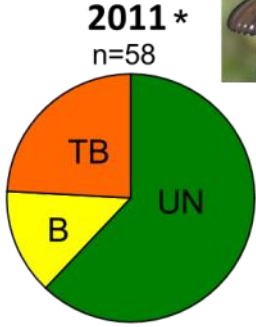
* Treatments within the same polygon indicate no statistical difference in community composition



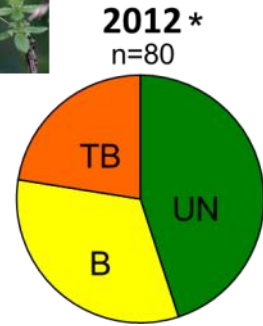
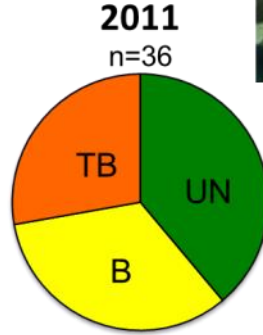
Pollinator functional groups

Butterfly families

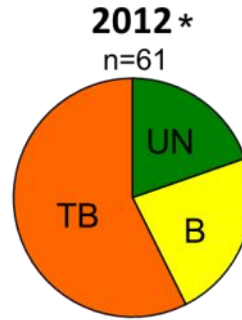
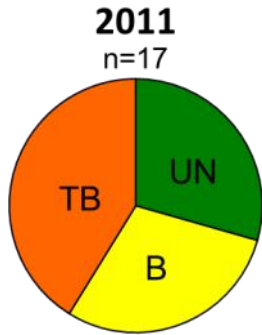
Swallowtails



Satyrs

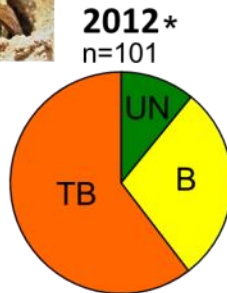
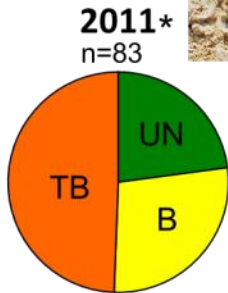


Brushfoots

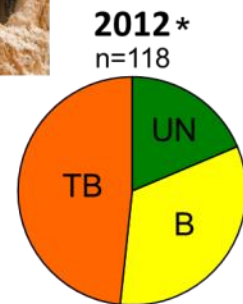
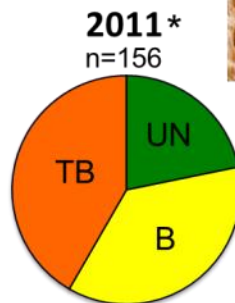


Bee nesting guilds

Soil



Wood



Stem

