General Koch Comments on Ecology Paper

Figure 1

* Pretty straightforward, not much to comment on

Figure 2

* Need a better way to differentiate ITS from 16s, tough to tell apart right now.
* 16S richness lower in leaves with exception of greens, similar pattern with ITS
* With ITS in particular, soil diversity greater than leaf. Not as much of a difference with 16s
* Unmanaged ‘prairie style’ plots no different than managed

Figure 3

* 16S groups by soil type (greens groups together, home lawn and fairway groups together, and unmanaged groups together).
* ITS groups by plant species (greens and fairways group together, home lawn groups together, and unmanaged groups together).

Figure 4 and 5

* I still don’t understand these very well. How do we use the information from these graphs moving forward?

Introduction outline (each one of these bullets should be 1 paragraphs, maybe 2 in certain cases)

* Turfgrass usage
* Microbiomes as a tool for sustainable plant management and soil health (ie a tool for reducing fertilizers, supplemental irrigation, and pesticides). Most of this information won’t be available from turf, will need outside systems.
* Does management intensity impact microbiomes in turf (Allan Perkins paper)? Outside of turf?
* Need to introduce the core microbiome concept from other papers and why it’s important.
* Final paragraph stating the project objectives.

Methods comments

* I think a Table 1 can list the 4 different systems and include columns for ‘management intensity’, ‘plant species’, ‘soil type’, ‘mowing height’…maybe others.

Discussion comments

* Need to tie our results in to other work both in turf and non-turf systems. How are they similar? How are they different? Are the similarities/differences important from a practical standpoint.
* Overall the discussion is a bit too long, try and cut down and focus on 2 or 3 really important results.