

# Updated outline

I. Import (procured) .csv

II. Viz site x spp lists

filter()

facet()

→ motivate SAD

III. SAD data prep

group-by()

arrange()

mutate()

ungroup()

IV. SAD viz

V. SAD summary

sum stats

even shannon → acknowledge

Hill - theory

Hill calc

Hill intuition building

→ summarize()

~~\*\*\*~~ Hill's  
summarizes  
a bit odd  
think

↳ left\_join

ggplot w/ facet, color