Alpha Diversity Method 1

- **Count OTUs**

- Simple, but…any issues?

Alpha Diversity Method 2

- **Shannon's Diversity**

- s = number of species

$$H = -\sum_{i=1}^{s} \left(p_i \log_2 p_i\right)$$

- p_i = proportion of counts attributable to species i

- equal representation leads to high diversity index (play with it in R)

Alpha Diversity Method 1

- **Count OTUs**

- Simple, but…any issues?