

Supplementary Figure 1. There is significant variation in metabolic pathways in only forest soil samples at high C:N. Log2 fold change in the regulation of metabolic pathways in (A) forest soil and (B) wetland soil when comparing High vs Low C:N ratio ranges. The Low C:N ratio group serves as the reference in both panels, with positive or negative log2 fold changes indicating upregulation or downregulation in the High C:N range relative to the Low C:N range. Functional abundances were predicted using PICRUSt2 and analyzed using DESeq2, with significantly differentially abundant pathways filtered according to p < 0.05 and log2FoldChange ± 1 .