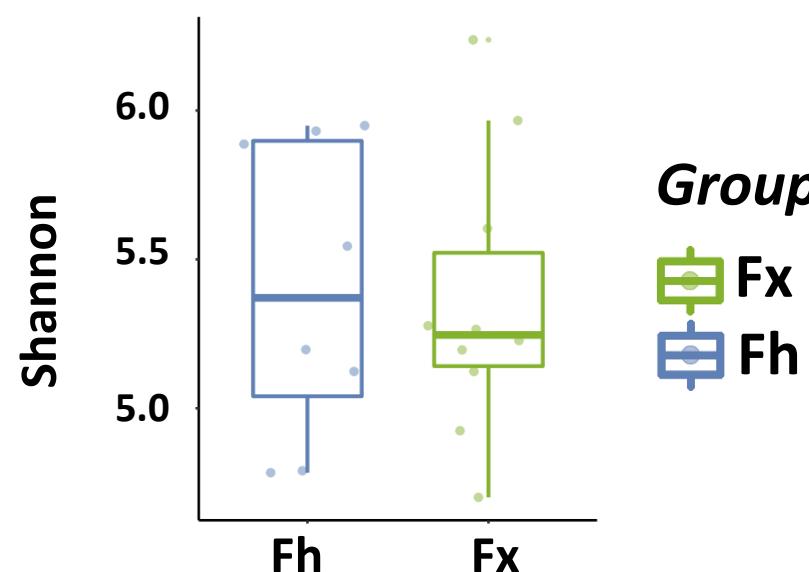
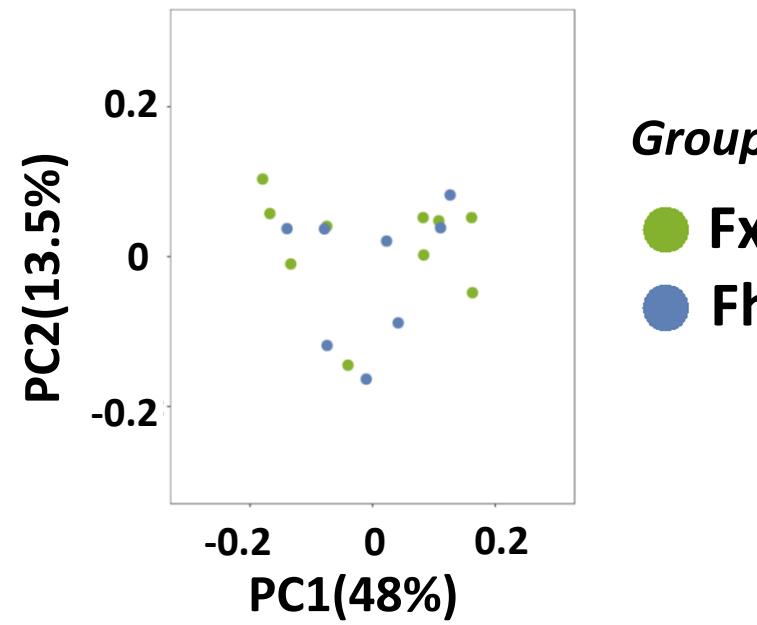
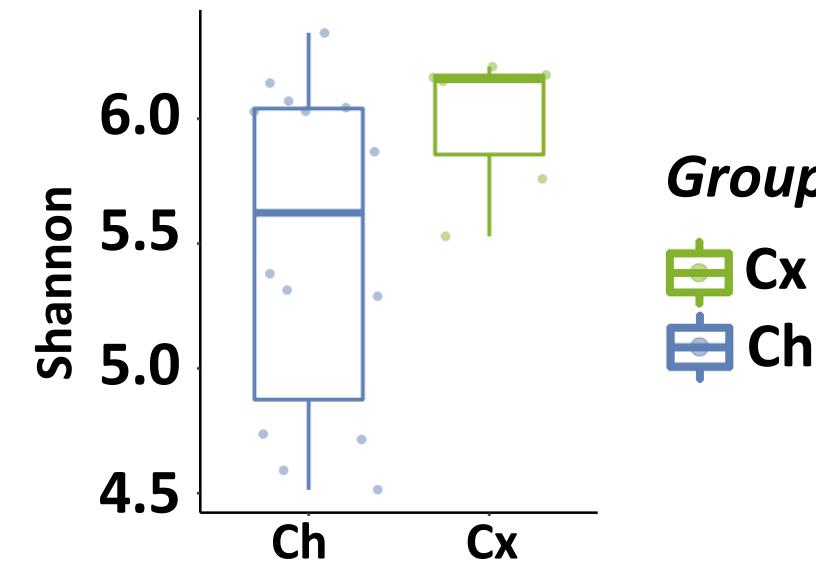
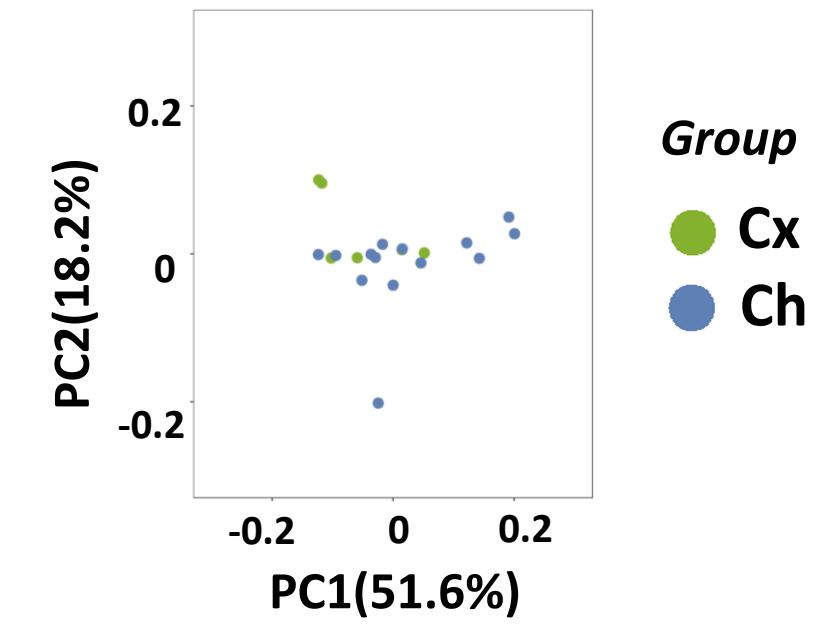


**Figure S1.** Differential abundance analysis using ADLEEx2 method based on ASVs abundance. (A) Fx and Cx; (B) Fh and Ch; (C) Fx and Fh; (D) Cx and Ch. Red dots indicate ASVs with significant differences.

(A)

*Group*Fx  
Fh

(B)

*Group*Fx  
Fh*Group*Cx  
Ch*Group*Cx  
Ch

**Figure S2.**  $\alpha$  and  $\beta$  diversity of yaks in the same feeding style. (A) Shannon index of yaks from different farms; (B) Principal component analysis (PCoA) based on unweighted UniFrac distance shows the distribution between samples from different farms.