

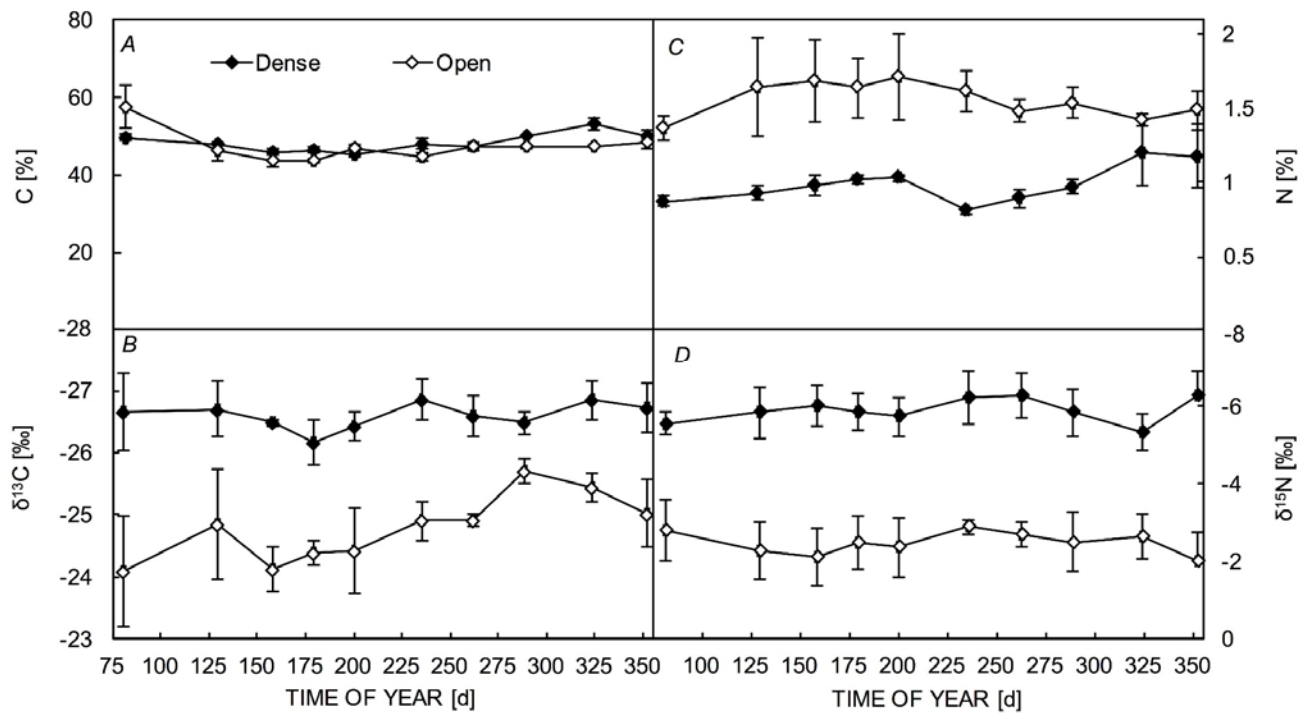


Fig. 1S. Seasonal trends in average leaf carbon (C, A), nitrogen (N, C), isotope ratio of carbon ($\delta^{13}\text{C}$, B) and nitrogen ($\delta^{15}\text{N}$, D), with standard error bars, in open grasslands (open symbols) and dense stand (full symbols) of *Juniperus virginiana* in the semiarid grasslands of the Nebraska Sandhills. N, $\delta^{13}\text{C}$, $\delta^{15}\text{N}$ in open differed significantly from dense stands ($p < 0.05$, $n = 5$ trees).