amount and timing of precipitation for the performance of this keystone grazer as well as for the biomass production and reproduction of the grass it eats. More specifically, the major goals of the research presented here are to better understand 1) whether critical climate periods for weight gain of adult bison of both sexes match juvenile bison, (NIRS) by the Grazingland Animal Nutrition Lab (GAN

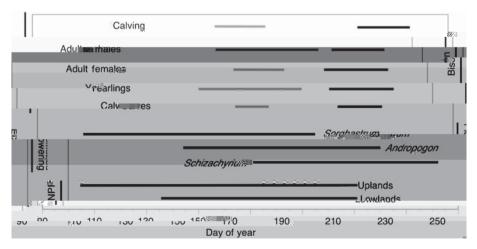


Figure 2. Critical precipitation periods for bison performance, grass flowering, i.e. culm production, and grass aboveground net primary productivity (ANPP). Bison performance includes calving rates of adult females in the following year as well as standardized weights for di

in the same annually-burned, ungrazed watershed as ANPP

during the growing season.

 $\begin{array}{c} \text{Martinez-Jauregui, M. et al. 2009. Are local weather, NDVI and} \\ \text{NAO consistent determinants of red deer weight across three} \end{array}$