Montana Climate Variability: a Challenge for Big Game Management

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In recent decades changes in climate have influenced wildlife populations worldwide. This paper presents recent climate data sets for Montana with an emphasis on some ways changes in climate have impacted big game populations and management in our state. Length
of growing season, winter severity, time of spring green-up, summer heat, drought, all may have direct or indirect impacts on wildlife populations. Indirect impacts include disease and disease vectors. These changes have implications for how we manage hunting and fishing opportunities. Recent declines in some of our big game species may be attributed in part to climate change. Hunting quotas and seasons have been modified to ameliorate some of the population changes. Further modifications in hunting season structure may be required to maintain hunting opportunities and sustain big game populations.