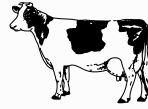


Climate Change and Agriculture in Alberta



Longer growing season and changes in crop and weed species.



Increased heat stress on wildlife and livestock

The future at a glance



More frequent drought conditions and water shortages. Precipitation will peak at times not ideal for crop production.

As climate change progresses in the prairies, we will see both **losses and **gains**.**



The range of viable agricultural land will expand as Alberta's ecozone's shift.

More frequent extreme weather events, such as hailstorms, heatwaves, floods and droughts may impact crop production. Heatwaves may cause livestock stress.

A longer growing season, increased heat units, and higher concentrations of CO2 will result in increased crop and pasture productivity.

Pests and invasive species' ranges may change with warmer temperatures, impacting crops.

Warmer temperatures will allow farmers to plant different crop varieties.

Precipitation levels will become more variable, and evapotranspiration will increase, leading to more frequent droughts and soil moisture deficits.

It's unclear whether the benefits of climate change will be offset by extreme weather events and other unknown, complex factors. Achieving net benefits will require adaptation to limit the impacts of climate extremes, including the management of water availability, invasive species, and by funding innovative research and crop insurance.

