

How does geography and water affect growth of crops?

Background: The environment is a combination of factors, such as temperature, precipitation (rain, snow, and hail fall) Geography impacts temperature – distance from equator, mountains/valleys Temperature impacts the types of crops that are grown in specific areas Precipitation varies worldwide (Köppen-Geiger climate map or alternate) In North America there is more precipitation in the East and it is reduced as you travel West.

Impact on plants: Corn – Corn is grown throughout the United States, so you've likely seen a field of corn or at least a picture. Corn yields across the United States are determined by the environment it is grown in because plants depend on water, light, and carbon dioxide to grow and produce fruit or grain. Where the temperature is warm with a lot of rainfall, like in xyz state, a farmer would expect x bushels of corn like in xyz state (enough to fill an 18 wheeler or some other visual). Where it's cold and dry, like in xyz state, yield of corn may only be x bushels (enough to fill). Worldwide yields – Africa, Europe

Forage component to relate to livestock?

Balancing Water for Human Needs Water is the most essential nutrient to life. We need water to live, both to drink and to produce food and feed. Additional demands on water to keep landscapes green, pools for summer fun, sanitary toilets, and showers add to the consumption required by humans. Quantity is not the only important aspect of water, quality is just as important. Some areas have brackish (salty) well water which reduce irrigation potential for crop production, these areas grow food 'dryland' which is risky for farmers. GPS and precision ag and how it helps reduce run off. Residue management of crops to increase water infiltration/storage and reduce run off. Farmers are intimately aware of the importance of water conservation.