



**Precision Ranching:**  
**Technological Solutions to Reduce the Impact of Raising Cattle in the Southwest**  
9<sup>th</sup> – 12<sup>th</sup> Grade Classroom Program

**Program Summary**

Students learn about precision ranching tools that are currently being researched in the Chihuahuan Desert. Using models of several technologies, students consider the usefulness and potential problems of these tools. They will then attempt to redesign one of the precision ranching tools to make it more useful to ranchers.

**Phenomenon**

New precision ranching (PR) tools have the potential to be useful in rangeland management.

**Next Generation Science Standards**

HS-ESS3-4: Evaluate or refine a technological solution that reduces impacts of human activities on natural systems.

Science & Engineering Practices	Disciplinary Core Ideas	Cross Cutting Concepts
Constructing Explanations and Designing Solutions	ESS3.C Human Impacts on Earth Systems	Stability and Change

**Agriculture, Food, and Natural Resources (AFNR) Career Cluster Content Standards**

CRP.07.CCTC Standard: Employ valid and reliable research strategies. Career ready individuals are discerning in accepting and using new information to make decisions, change practices or inform strategies. They use a reliable research process to search for new information. They evaluate the validity of sources when considering the use and adoption of external information or practices. They use an informed process to test new ideas, information and practices in their workplace situation.

CRP.08. CCTC Standard: Utilize critical thinking to make sense of problems and persevere in solving them.

CRP.10.04: Identify, prepare, update and improve the tools and skills necessary to pursue a chosen career path.

CRP.11: Use technology to enhance productivity