

### INTRODUCTION

Climate change has created problems that will be around for the rest of human history if they are not taken care of. Human produced CO2 emissions have been at the root of climate change along with many other human induced factors. The solution is not simple as it will take many different solutions to solve this problem but regenerative agriculture could play a key role in the battle against climate change. Regenerative agriculture is a practice that focuses on soil health and creates self reliant ecosystems on farms. Regenerative agriculture builds a soil that conserves water, reduces erosion and captures carbo



### **Research Question**

- Agriculture contributes 10% of greenhouse gas emissions as apart of the 2019 EPA survey.
- If traditional agriculture land converted to regenerative agriculture then could this potentially reverse climate change?

# **Battling Climate Change with Regenerative Agriculture**

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### **METHODS**



- Used articles that reported on their three decade study of comparing regenerative agriculture and traditional agriculture
- Used articles that agreed and disagreed about the potential of regenerative agriculture to mitigate climate change

### RESULTS

- Studies from the Rodale institute suggest regenerative agriculture could sequester more carbon annually than is emitted
- Produces ecosystems that become self reliant and do not require the external input of fertilizer
- Can produce higher yield, decreased emissions, decrease pest population, conserve water and resources.

### COMPARISON OF FST Organic and conventional systems 5000 m 4000 3000 2000 \$558 1000 8 é0

yields profit (\$/a/yr) (lbs/a/yr) ORGANIC CONVENTIONAL Ibs-pounds a-acrey r-year MJ-megajoule



### CONCLUSIONS

In conclusion, Regenerative agriculture has the ability to sequester more carbon than traditional techniques. This comes from the practices used such as cover cropping, increasing biodiversity in crops, and no-till. These techniques can lead to maximization of carbon sequestration rates and potentially mitigate the effects of climate change.



### REFERENCES

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Take action and do research on where you get your food from as you can be apart of the solution to combat climate change supporting farms that practice regenerative agriculture.