

SOIL CARBON SOLUTIONS CENTER INTERN LARIMER COUNTY

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Internship Project

During my internship, I developed a resource guide geared towards Colorado producers, explaining carbon markets. The guide provides detailed information on soil carbon, regenerative agriculture, carbon markets, payments for ecosystem services, and the associated risks and benefits of participation. Additionally, it offers a list of further resources to support producers in navigating these emerging opportunities.

Internship Goal

The primary objective of my internship was to address the knowledge gaps that exist among producers regarding carbon markets, making critical information more accessible to them. There is currently a significant disconnect between the scientific understanding of carbon markets and the level of awareness among producers.

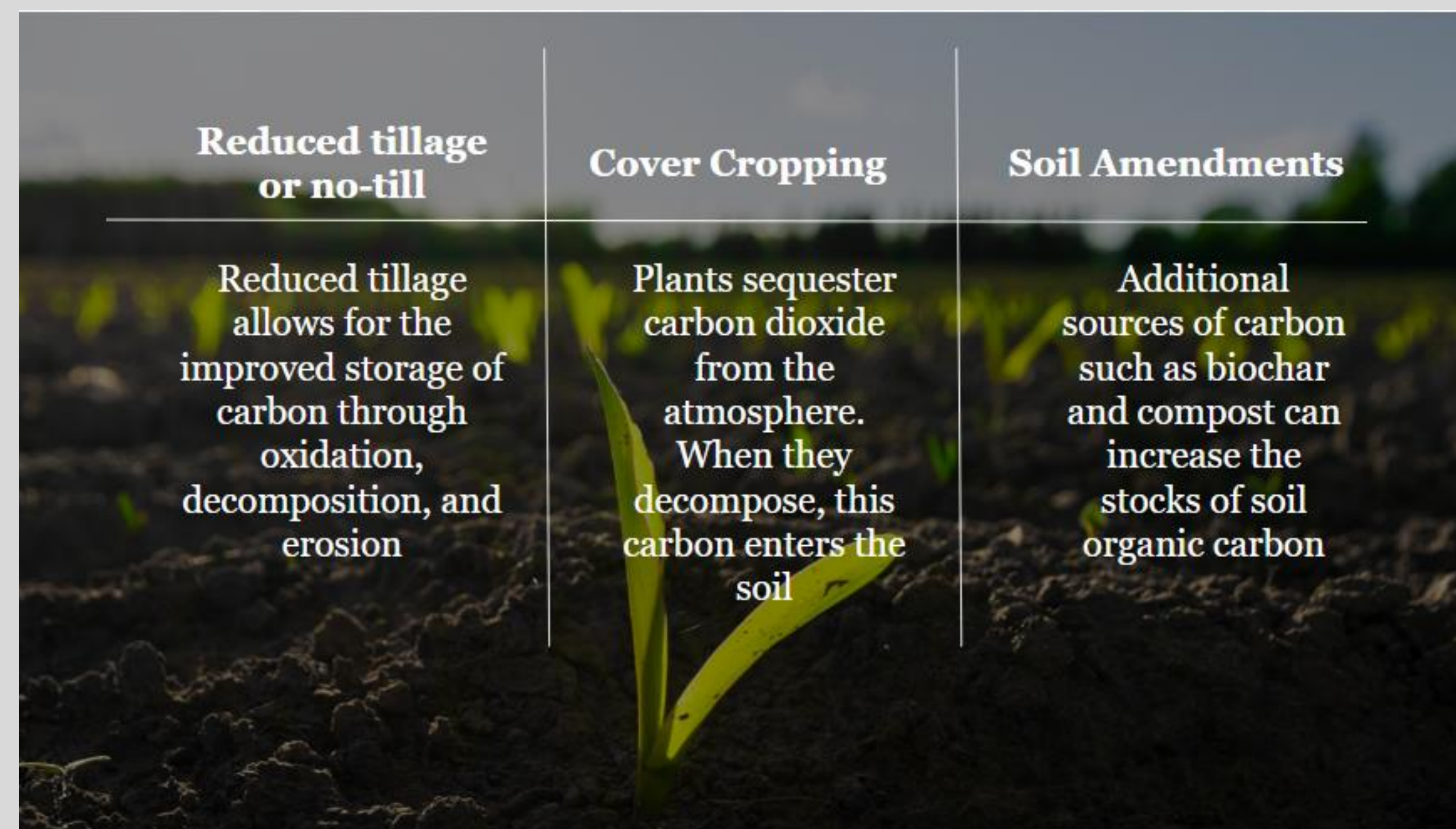
Educational Impact

This project has contributed to my education by expanding my understanding of agriculture and its connection to carbon markets. It has also provided me with insights into various career paths within sustainable agriculture. As a result, I now have a more comprehensive and well-rounded knowledge base in concepts closely related to my major.

Internship Process

At the beginning of my internship, I dedicated a considerable amount of time to researching and gaining an in-depth understanding of all aspects related to my project. To advance the project, I scheduled and led meetings with individuals from Extension and various other organizations such as IN-RICHES, and American Farmland Trust. Also, I collaborated closely with colleagues, including Dr. Lauren Gifford, Dr. Jane Zelikova, and Margaret Morgan, to finalize the project.

Figure 1.



Adapted from Barbato, C.T., Strong, A.L. Farmer perspectives on carbon markets incentivizing agricultural soil carbon sequestration. *npj Clim. Action* 2, 26 (2023). <https://doi.org/10.1038/s44168-023-00055-4>

Key Learnings

Throughout my internship, I gained a deep understanding of the science behind soil carbon and regenerative agriculture, and their roles in mitigating climate change. I also explored how carbon markets operate, along with the challenges they present, and the common barriers producers face. In addition, I developed skills in professional collaboration and networking, learning how to effectively work with others and build valuable connections.

Table 1.

Benefits of participating in a carbon market	Challenges of participating in a carbon market
Ecological co-benefits of practice adoption	Payments for offset credits are too low
Improved bottom line for the producer	Additional requirements are a significant barrier
Financial incentives through the selling of offset credits	Unpredictability of the market and payments
Increase resilience and sustainability of the operation	Geared towards large, commodity-based operations

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What's Next?

The next phase involves regularly updating the resource guide and focusing on its distribution. Given the evolving nature of this field, it will be essential to keep the guide current. Furthermore, I will continue my work at the center, contributing to this project and engaging in various other tasks.