

# Agrivoltaics: From Farm Fields to Rooftops Fort Collins, CO

Interns:  
Tatianna Hall  
Bjorn Thune-  
Larsen

Mentors:  
Jennifer Boussetot  
Todd Ballard  
Ron Meyer

## Project Intro

Agrivoltaics is the process of combining plant production with photovoltaic energy, also known as, solar panels.



## Internship Goals

Our internship focused on the growth of leafy green vegetables under a variety of panel environments.

## Application to Education

Both Bjorn and Tatianna are pursuing Bachelor's degrees in horticulture with a concentration in the controlled environment. This internship gives us valuable hands-on experience with vegetable production as well as microclimates created by the panels.

## What We Did

- Routine maintenance of agrivoltaic plot
- Data collection on 5 species of leafy green vegetables
- Transplanting and irrigation work in Terra Building at CSU Spur
- Wheat field day in Burlington, CO
- Trip to Fruita, CO touring extension offices
- Tour of Jack's Solar Garden in Longmont, CO
- Mile High Green Roof Symposium at CSU Spur



## What We Learned

- How to cultivate leafy crops in an outdoor setting
- Fundamentals of outdoor controlled environments
- How to design and maintain a green roof
- What goes into substrate and irrigation on a green roof
- More about what we want to do

## Next Steps

Bjorn and Tatianna will be graduating in the spring of 2023. Tatianna plans to work in the urban farming industry managing food production on green roofs and vertical farms. Bjorn plans to utilize his skills across all aspects of controlled environments including agrivoltaics, mycology, urban agriculture, and permaculture work.