Cody Zesiger Meeting

What a robot would be used for:

- Crop Monitoring
- Turning things on/off
- Performing field tasks
- Auguring (for Soil Samples)

Primary Use: Possibly replacing laborers,

- >$600/acre costs need to be replaced for practicality
    - Highly repetitive
    - Strange hours
    - Eliminates high production costs
- *Weeding
- *Harvesting by hand
- Irrigation Management
    - Opening/close valves
    - Wheel Lines
- Imaging, sample collection, monitoring
- Coactive crop monitoring
- Possible Scope: Robot that can note crops and walk down rows

*Highest cost items

Parameters:

- Going down fields, avoiding crops, don't kill the robot
- Difficulty with fields
    - Plowed Fields have varying ground heights
    - Vines/stalks can stop the robot
    - Raised beds
    - Floodwaters, puddles, mud
    - Snow, thawing soil (muddy)
- Possible scope: Images, sampling (+devices to attain sample)

Pain Points:

- Getting a lot of samples, moisture, weeds, other repetitive tasks
- Costs (Many robots are limited by who can afford them)

Timeline:

- Avoid snow
- Testing: Late Match-May: 3-5 Dry Down
- Jan-Feb: Small tests or use U of U lawn