

2024 Agronomy CDE Team Event

Region: East Region

Crop: Corn Silage

Scenario: You have been called to scout a corn field for a dairy customer, Terry Van Roessel. Terry buys seed corn from you for silage corn. It is June 1st and the corn is V3. There has been excessive rainfall this spring. There is a concern with stand establishment and potential silage tonnage. You utilized your drone to fly stand counts with DroneDeploy (scouting report below) to help evaluate the stands.

Primary Customer Concern:

- How will current crop conditions (plant health and stand establishment) impact silage tonnage?
- After making your observations, you will lay out the options that the grower has and make your recommendation for keeping the current stands, spot planting, or terminating the crop and replanting.

Field Observations:

- Sporadic stand loss across rows. Pattern is random and somewhat diagonal in nature
- Appears concentrated in certain areas of the field where water ponded after planting.
- Un-emerged seed, weak or delayed seedlings, and seedling death are all present.
- Evidence of shallow planting and reduced root growth are present

Picture 1 – Customer's Field Picture



Picture 2 – Neighbor's Corn Field – Planted same day with same hybrid by same customer







90W-SW2024 Stand Count

Stand Count Report



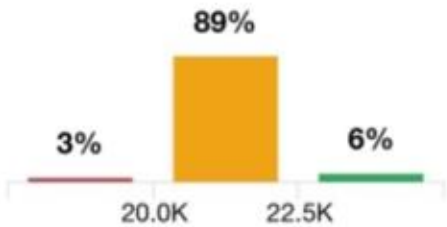
Pilot:

Images Captured: 29

Flight Plan: Stand Count

Acres: 121

Site Population



Summary

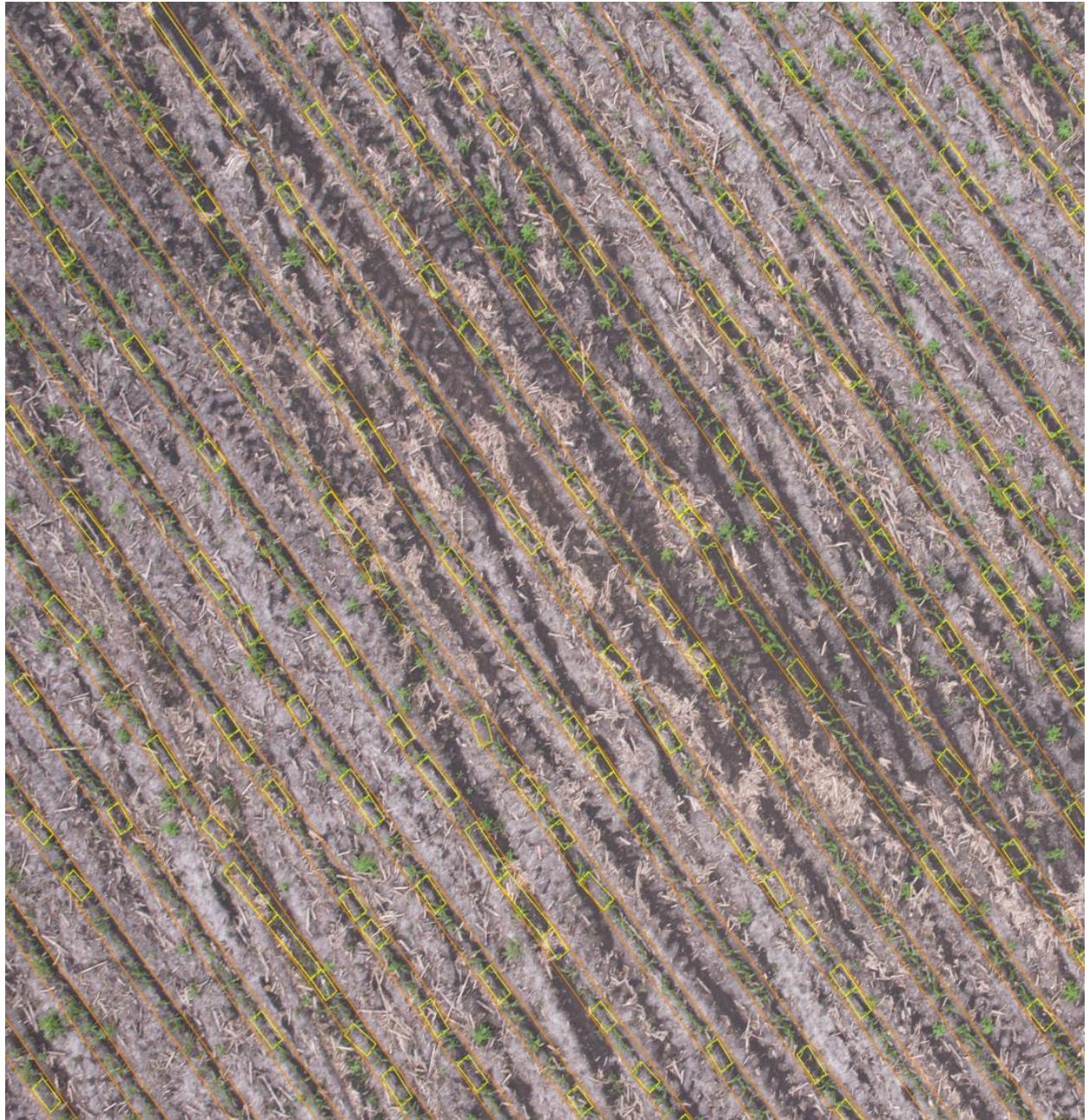
Median Population21,000/ac

Crop Type🌽 Corn (V2/V3)

Median Spacing7.15"

Median Gap Count3,069/ac





Previous Crop:

- 2023 Crop was Silage Corn, that yielded approximately 25 ton per acre
- A rye cover crop was planted in September 2023
- This field has been in continuous corn silage with rye cover crop since 2018

Field Management:

- No-Till management with rye cover crop terminated by herbicide pass in April 2024.
- Soil Type: Frederick
- Soil Texture: 40% Sand, 40% Silt, 20% Clay

Nutrient Management:

- Soil Test Results, Spring 2024 – Fertilizer Index Values (FIV):
 - pH – 6.3
 - Phosphorus FIV – 58 (Optimum)
 - Potassium FIV – 23 (Low)
 - OM% - 1.5%
- Lime Source, Recent Lime Sample from Eastern PA.
 - 37.1% CaO, 12.3% MgO
- Dry Fertilizer applied pre-plant in Spring 2024:
 - MAP (11-52-0) – 0 lbs/acre
 - Potash (0-0-60) – 300 lbs/acre
 - Urea (46-0-0) – 65 lbs/acre
- Liquid 2x2 starter fertilizer at planting:
 - 20 gal/acre 6-18-18 (10.6 lb/gallon)
 - 2 gal UAN 28-0-0 (10.62 lb/gal)
 - 3 gal ATS (12-0-0-26S) (11.1 lb/gallon)
- PSNT Soil Test obtained on May 24, 2024.
 - NO₃ – 14 ppm
- Nitrogen sidedress with UAN-28% planned for V4-V5, shortly following field scouting.
- Dairy manure was surface applied in Fall 2023, prior to establishment of rye cover crop.

Crop Management:

- A 115 CRM Roundup Ready hybrid was planted May 5th @ 32,000 seeds/ac.
- Planter is a 16 row John Deere on 30" row spacing.

Water Management:

- Field has systematic tile drainage on 40' centers at an angle across the field

Weed Management:

- 2023 Weed Management Program
 - Cover Crop Terminated - April 2023

Gramoxone SL 3.0	2.5 pints / acre
Crop Oil Concentrate	1.0 % volume / volume

- Pre-Herbicide Treatments

Bicep II Magnum	1.6 quarts / Acre
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- Post-Herbicide Treatments – Planned application at V4

Roundup Powermax 3	30 ounces / acre
Capreno Herbicide	3.0 ounces / acre
Ammonium Sulfate	17 pounds / 100 gallons water
Crop Oil Concentrate	1.0 % volume / volume

- 2024 Weed Management Program
 - Cover Crop Terminated April 2024 with

Gramoxone SL 3.0	2.5 pints / acre
Crop Oil Concentrate	1.0 % volume / volume

- Pre-Herbicide Treatments

Acuron Flexi	Labeled Rate
AAtrex 4L Herbicide	2.0 pints / acre

- Post-Herbicide Treatments – Planned application at V4 stage of growth

Halex GT Herbicide	4.0 pints / acre
Ammonium Sulfate	17 pounds / 100 gallons water
Non-Ionic Surfactant	1.0 quarts / 100 gallons water

Insect Management:

- 2024 Corn seed treated with Acceleron Elite Seed Treatment Package

Acceleron B310 ST	0 .0141	Mg ai/seed
Acceleron B360 ST	33	ML/100 kg
Acceleron N314	0.035	Mg ai/seed
Allegiance FL	0.006	Mg ai/seed
Fluoxastrobin ST	0.084	Mg ai/seed
Poncho 600	0.5	Mg ai/seed
Redigo 480 SC	0.084	Mg ai/seed

Disease Management:

- 2024 Disease Management
 - Planned application

Miravis Neo	13.7 ounces / acre
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