Vision:
We passionately challenge ourselves to cultivate growth, personally and collectively, in order to create an enduring environmentally-conscious business and family.

Mission Statement:
We will succeed by innovating, producing high quality products, building strong relationships, growing our market intelligence and utilizing production technology.

Core Values

- Innovators
- Practicing Integrity
- Adaptability
- Uphold Family
- Partner of Choice
- Sustainability
Overview: The Farm

- 3rd Generation Family Farm
- 3300 acres of row crops and vegetables all under center pivot
- What we grow:
  - Forage Corn, Seed Corn
  - Seed Soy, Non-gmo soy
  - Alfalfa
  - Snap Beans, Sweet Corn
  - Kidney Beans
  - Pumpkins
- Sandy Soil!! Soil is under 1% OM.
- 25% of Acres are Organic or in Transition
- Tech, Research, Growth Focused!
Best Farming Practices

- Conservation Strip Tillage
- Cover Cropping
- IPM Program
- Cultivation
- Research Focused
- Partnerships
- Soil/Water Probes
- Soil Health Focus and conservation application
  - EC Mapping
  - VRT, VRI and VR fertigation
  - Zone Sampling
Your Environment is Ours, Too!!

- We work hard to farm sustainably and responsibly.
- We value the education from our historic projects and continue to uphold our established values.
- We work on projects for our environment:
  - Cover Cropping
  - Natural Pollinator Habitat Establishment
  - Ecology Restoration
  - Water Sustainability
  - Wind Erosion Control
  - Ground Water Studies
Research Based!

- Pete worked on NRCS soil sampling
- 1960’s strip tillage and cover cropping
- 1988 first grid sampling
- Worked with NASA in 1988 to ground truth NDVI
- 20 year root rot research plot
- UW researcher relationships
- Currently NDVI, VR, and Biologicals research
Organic Transition

Why?
- Soil Health
- Reduced impact on environment
- Productivity
- Environmental regeneration and sustainability
- Experience with Veg Crops
- Demand
- Legacy of our farm

When?
- Continuing to transition ground.
- 2016 started Officially organic farming

How?
- 20% Transitioned now, working to transitioning 33%+
Philosophy of Transitioning

- Increase soil health with use of cover crops
- Reduce the weed bank
- Prepare the land for our anticipated rotation
- Increase cover crop and rotation diversity
- Choose fields that needs soil health attention
How Are We Transitioning?

• 1 or 2 year cover-crop
• Soybeans
• Alfalfa
• Sunflower
• Practicing small scale trials
• Slowly!
• We’ve chosen ground that benefits most from organic practices.
Breaking Down the Numbers…..
Weathering the Storm

• Costs of weed management
• Cost differential of organic products vs. commercial products
• Front loading field fertility inputs
• Cover crop mixes and costs
• Rental agreements
• Revenue gap (if any)
Weed Management: Different Philosophies

- **Reduced Cultivation & Tillage**
  - Planting into an existing crop
  - Planting into a winter killed cover
  - Tilling and planting into a non-covered field and sowing an inter-crop

- **Traditional Tillage**
  - Tilling field
  - Cultivating until row closure
Weed Management: Reduced Cultivation

Non-vernalized rye spread 10 days, 5 days, and 0 days before planting.

Results of Non-vernalized rye: 5-12 bu yield higher than cultivated rye.
Weed Management: Reduced Cultivation

• Top Picture: 6/13/2018
• Planted 5/25 and crimped approx. 6/10/2018

• Bottom Picture: 6/26/2018
• Grass weeds starting to come through rye cover

• Soy eventually outgrew grass weeds, but was not a “clean” looking field
Weed Management: Reduced Cultivation

July 20\textsuperscript{th}, 2018

*Interseeding!*

Corn – Trialed in 2018 – Mix: Crimson Clover, Winter Peas, Teff Grass, Collards

Cucumbers: Trialed in 2018 – Mix: Buckwheat, Kale, Non-vernalized Rye

July 29\textsuperscript{th}, 2018
Weed Management: Cultivation

- Tillage:
  - Sunflower Disc
  - Rubin 9 Lemken
  - Turbo Till
  - Orthman Strip till

- Cultivation Early
  - Tine Harrow
  - Rotary Hoe
Weed Management: Cultivation

- Row crop Cultivation
  - 22” Sukup Rigid Blade Cultivator with Finger Weeders
    - Can get nearly Intra-row
  - 12 row 22” Lilliston Rolling Cultivator
    - Can be adjusted to be aggressive, high speed operations possible
Weed Management: Cultivation

• Row Crop Cultivation
  • Danish Tine Cultivator
    • All around versatile
  • C-shank Cultivator
    • Aggressive use when roots established
Why We Care... Legacy!!
We are the Wallendal Farms Family