• Located in Nora Springs, IA

• 7 + years of Cover Crop Experience
• Specialize in
  o Locally Grown Cereal Rye/Oats
  o Custom Cleaning
  o Cover Crop Mixes
  o Aerial, Drilling, Inter-seeding
  o One Stop Shop
History

• 2012
  o planted cover crops for the first time
  o Approximately 500 ac. in Osage area aerial seeded

• 2013
  o ~750 ac. aerial seeded

• 2014
  o Sponheim Sales and Services was formed
  o Purchased 40 ac. of locally grown cereal rye
  o ~1200 ac. aerial seeded

• 2015
  o 4 local cereal rye producers (70 ac.)
  o 3800 ac. aerial seeded
• 2016
  o 7 local cereal rye producers (250 ac.)
  o 5500 ac. aerial seeded
  o Custom No-till drilling was offered
  o 3100 ac. custom drilled

• 2017
  o 7 local cereal rye producers (300 ac.)
  o 6 local oat producers (80 ac.)
  o 12,000 ac. aerial seeded
  o 4500 ac. custom drilled
• 2018
  o 18 local cereal rye producers (750 ac.)
  o 9 local oat producers (200 ac.)
  o 17,000 ac. aerial seeded
  o 3500 ac. custom drilled
  o Custom inter-seeding was offered
  o 300 ac. inter-seeded

• 2019
  o 20 local cereal rye producers (1050 ac.)
FYI

• In 2018 locally produced cereal rye only covered 48% of total volume sold
• In 2018 55% of total rye sales was marketed through our custom applicators, 17% to seed customers, and 28% to our dealer network.
ONE STOP SHOP

• Meet with Producer
  • Develop producer’s cover crop plan
  • Work with NRCS

• Schedule Application
  • Flight Plan-Aerial
  • Field Maps-Drilling

• Supply Product to Applicators
  • Deliver to Airports
  • Deliver to Drills
  • Deliver to Customers(own application)

• Supply Needed Info to Producers
  • Seed Tags
  • Invoice – both seed & application
  • Coverage Maps
SEED PRODUCTION CHALLENGES

- Timely Planting
  - Following normal cropping practices
  - Weather Issues
  - Must Germinate!!

- Overwintering Success
  - Fall Growth
  - Freezing/Thawing

- Spring Conditions
  - Final Dormancy Break
  - Final Stands
  - # of Tillers/plant
  - Temperature

- Harvest
  - Quality
  - Moisture
  - Weather
SEED BUSINESS
CHALLENGES

• Keep up with Seed Laws
  • Yearly Contact with IDALS
  • Certified vs. VNS
  • Royalties

• Germination & Purity Tests
  • Lack of convenient Labs
  • Turn Around Time
  • Cost

• Storage
  • Dirty
  • Clean
  • Scale

• Cleaning Equipment
SEED BUSINESS CHALLENGES (con)

- **Transportation**
  - Trucks
  - Conveyors
  - Tenders

- **Application**
  - Planes
  - Drills
  - Other (Inter-seeders, Air-seeders, and future ways)

- **Pricing**
  - Seed acres income competitive with corn/soybeans
  - Rye is not a traded commodity
  - There is no industry-wide pricing structure
MISSION STATEMENT

Sponheim Sales and Services strives to promote the adaptation of conservation practices: cover crop and strip/no tillage, by providing individualized customer service, knowledge, and products for farmers, growers, and retailers.
Dean Sponheim
641-330-0949
dean.sponheim@plantpioneer.com

Tracy Church
515-771-4516
tracynchurch@gmail.com

Rachel Amundson
641-330-0771
rachel.amundson@plantpioneer.com

Josh Sponheim
515-291-7628
jsponheim@premiercrop.com
Rock Creek Watershed:

1. Part of the Upper Cedar River Watershed
2. Flows in Floyd, Mitchell, and Worth counties
3. 87.9 miles long
4. 70 square miles
5. 44,787 total acres
6. 38,964 row crop acres (87%)
7. 242+ landowners

GOALS & OBJECTIVES

1. Reduce in–stream nitrogen loading by 41% from 2010 levels.
2. Reduce in–stream phosphorus loading by 29% from 2010 levels.
3. Increase soil organic matter by 1%.
4. Maintain or increase agricultural productivity and profitability.
5. Reduce flood risk.
6. Maintain or increase upland wildlife habitats.
7. Maintain or improve aquatic life.
WHAT NEEDS TO HAPPEN TO MEET GOALS BY 2034:

1. All cropland acres must be no-till or strip tilled.
2. All cropland acres must be seeded to cover crops.
3. All cropland acres must be following 4R Nutrient Management recommendations.
4. 25 Bioreactors / Saturated Buffers.
5. 7 Nitrate Removal Wetlands (1000 acres or more of drainage area).
6. 3,000 acres of Control Drainage.

WHERE WE STARTED AND WHERE WE ARE NOW:

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<th>2013</th>
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