DIRECT SEED CROPPING SYSTEMS
CONFERENCE
FEB 6 & 7
"Advancing the future of sustainable farming."

PACIFIC NORTHWEST
direct seed
ASSOCIATION 2013
Direct Seed, why us?
• Allen Druffel
  o Farming full time for 7 years, followed around a tractor my whole life
  o Never Plowed
  o Never Conventionally seeded

Our Farm
  o 50 miles
  o Diverse rainfall
    • 8” to over 20”
  o Diverse soil
    • Palouse Silt/loam
    • Sand/Rock mix?
Seedhawk

- Individual Depth Control
- 10.5” Spacing
- Shank Opener
  - LOW MAINTENANCE
  - Micro Tillage
  - Precise Placement
• **Three Products**
  - Seed
  - Starter Package
  - Nitrogen Band

• **Steering rear axle**
  - Adjusts to reduce draft on steep side hills
Why We Direct Seed

Healthy Soil, Healthy Plants, Healthy Food

• Sustainability
  o Improve Soil Health
  o Decrease Erosion
  o Reduce Fuel Usage
  o Reduced Fertilizer?!?
Preparation Starts Before Harvest

- **Varieties**
  - Badger
  - The 4 and 5s
  - Ovation
  - Whetstone

- **Residue Management**
  - Combine
  - Flail
  - Harrow
  - Chemical
• Palouse
  o 3 year
  o FW, SG, SP
• Tammany
  o 3 year
  o FW, SW, SF
• Always adapting
• Pesticide Residual

• Long term rotations
  o Grass seed
    • Rebuilding soil structure
Fertilizer and things

- Banding Fertilizer
  - Put Nutrients where the plant wants them!

- VRT
  - Put Nutrients where the soil needs them!

- Timing
  - Apply Nutrients when the plant wants them!

- Amendments
  - Molasses
    - Feed the bugs
  - Humic Acid
    - Replicates Soil Humis
  - Micros
    - Beyond NPKS
  - Lime
    - Are we headed for a PH cliff?
Lots of Improvements

- Fertility options
  - NH3
  - Aqua
  - Urea
  - Dry
  - Natural???
Reduced Synthetics

- Long term No-till
  - Increase soil organic matter
- 60% of traditional N
- Free up organic N
  - Let the microbes work
  - Soil temp matters

- Where it's working for us
  - Warmer areas
  - Fall crops
  - Struggles with adaptation
    - Avoid the highway!
Technology

- **Planning**
  - FarmWorks
    - The learning curve
  - Yield maps
  - Sat Shots
  - Experience
    - Or lack of for me
  - Data overload
    - What counts for us
• Yield Maps
• Auto Steer
  o Seeding
  o Harvesting
  o Spraying
  o And everything else
• VRT
• Auto boom
  o 10% - 20% overlap W/O
  o 1%-3% W

In Field
• Ten years from now
  o Manage PH problems
  o Manage weeds
    • Rattail Fescue
  o Rearrange fertility
    • NPKS
    • Where is what nutrient needed?
  o Continue improving soil health
    • Can we repair a bare clay knob? The ultimate challenge

• What’s correct?
  o Hell if I know
  o The more I learn, the less I think I know

• Challenges
  o This is what makes agriculture exciting
  o Adapting to change

• The next chapter
  o Manage soil to manage profits!
Questions, or comments?