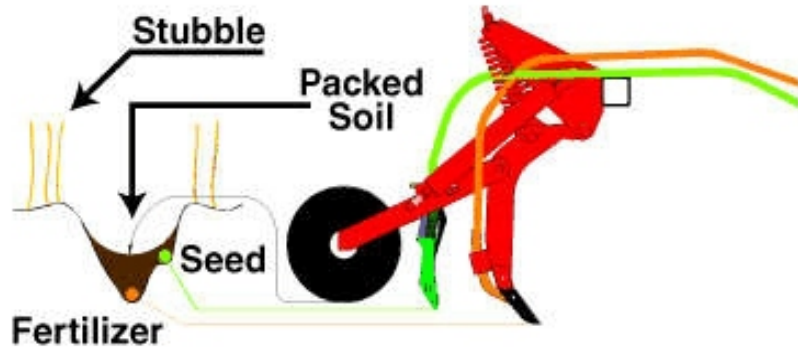


Conserva Pak Evolution

1983 = invention
1989 = first sales



2005 = new design released



2007 = John Deere acquires the technology



PROVEN BENEFITS OF CONSERVA PAK SEEDING

(by Jim Halford, P.Ag., May, 2007)

1. Improved Soil Environment

- stopped all wind erosion and minimized water erosion
- improved organic matter
- improved soil structure
- improved long-term soil fertility

2. Increased Water Use

- more storage from snow and rain
- crops have more uniform moisture
- less evaporation due to residue cover and standing stubble
- moisture available for crop emergence

3. Better Crop Yields and Optimized Fertilizer Inputs

- same yield and higher protein wheat with 30 lbs./ac less nitrogen
- same yield of canola with 30 lbs./ac less nitrogen
- no phosphate fertilizer needed for field peas and wheat*
- can achieve higher long-term yields on improved soil

4. Lower Annual Operating Costs

- use only 1/3 the fuel compared to previous multi-operations
- very low annual equipment operating costs (openers last 15 - 20,000 acres)

5. Less Equipment Investment Required

- only need:

- tractor (300 - 350 hp for 400 bus air cart, 56 ft. seeder, and even a NH₃ or liquid tank)
- sprayer
- seeder (fertilize, seed and pack)
- harvesting equipment

6. Environmental Benefits

- eliminates pollution of air and water by soil
- less fossil fuel required and reduced CO₂ emissions due to fewer operations
- less nitrogen fertilizer required, thus saving fossil fuel used in production and transportation
- appears that lower phosphate fertilizer is needed*
- soil acts as a carbon "sink" for CO₂**

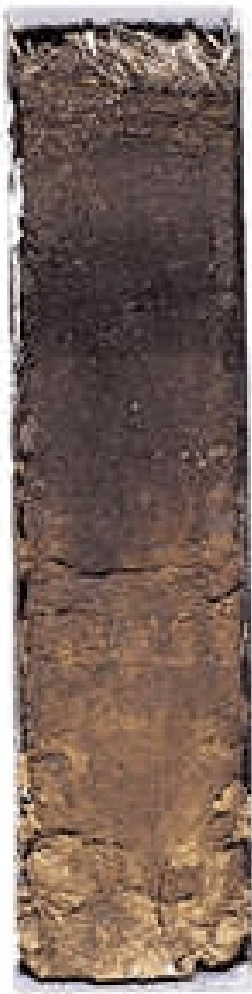
NOTES:

* Four years of trials have shown no benefit from phosphate fertilizer on field peas and wheat on soil improved by the Conserva Pak Seeding System.

** The Halford farm stored 1.0 - 1.25 tonnes of CO₂ per acre per year over a 20-year period.

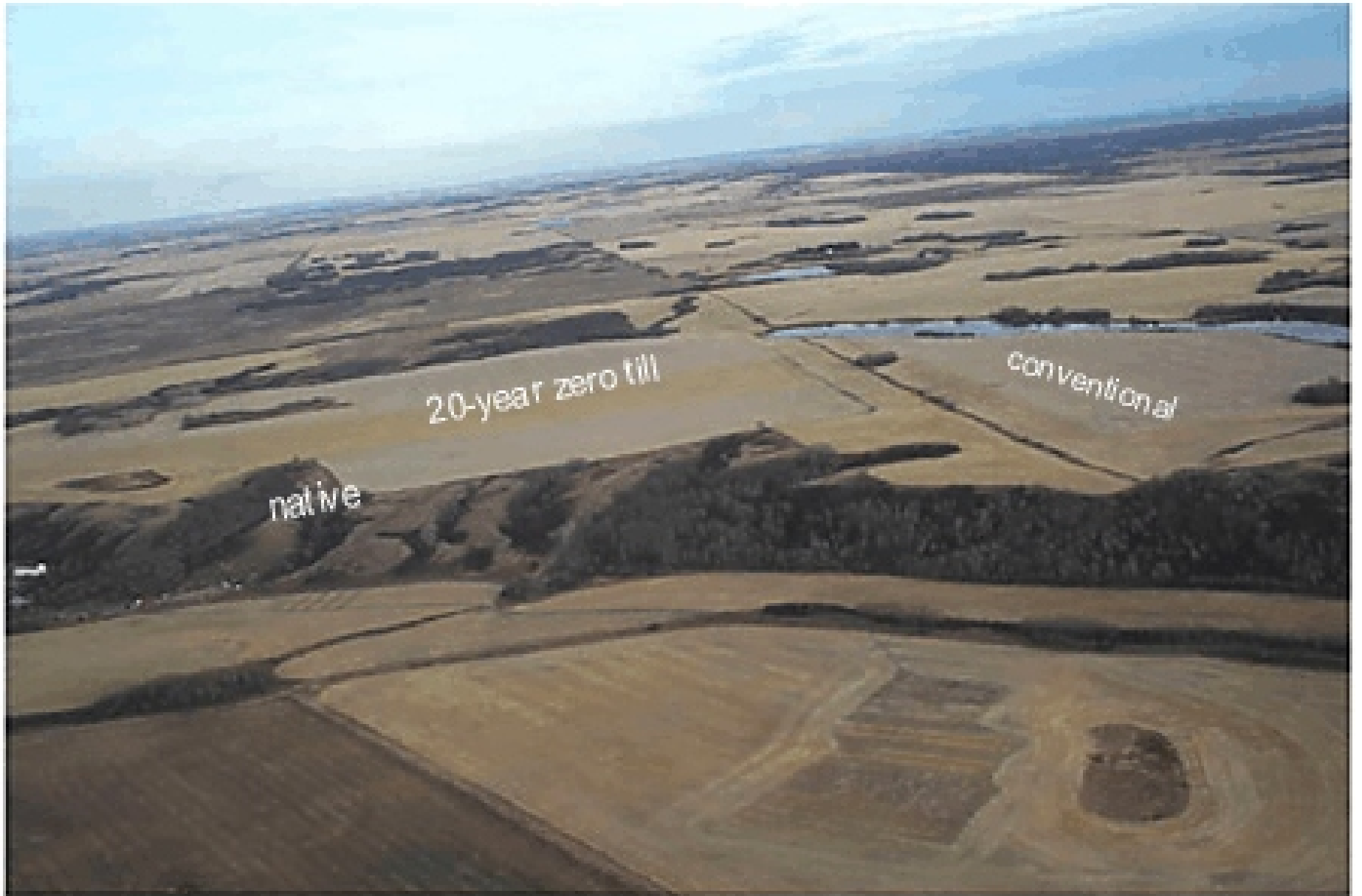
Points 1, 2, 3 and 6 have been proven by research conducted on the Halford Farm by the University of Saskatchewan and Agriculture and Agri-Food Canada.

Points 4 and 5 are based on the experience of numerous owners.

Native Prairie**100 Years Tillage****80 Years Tillage
20 Years Conserva Pak**

soil organic matter (tons / acre)	65	44	57
water infiltration (inches / day)	3.4	1.4	4.4
nitrogen available (lbs. / acre)	6077	4117	5759
organic carbon (tons / acre)	38	26	33

NOTE: *All measurements were made by Agriculture and Agri-Food Canada.*



Location of Soil Samples