

Direct Seeding into Sod 2003-2008

Project ID: 2003A

Cooperator: John Reid

Partners:

- Reduced Tillage LINKAGES (Roger Andreiuk)
- Grey Wooded Forage Association

2009 Project Results



For 2009 John decided to grow Peas and Barley for Swath Grazing on field WN, the last field to join the sod seeding project on the west farm. This is a long field along the north edge of the quarter, running west from the old drainage ditch.

This field had been sprayed out and swath grazed using direct seeded barley and fall rye in 2007. There were severe dandelion prob-

lems in that crop.

In 2008, wet conditions led to the field not being seeded at all. It was sprayed with glyphosate in early July 2008. The field was sprayed again with glyphosate and Express in September 2008, resulting in excellent kill of all weeds, including grass and dandelions.

On May 29, 2009, Harald Magnus direct-seeded a mixture of barley and peas and drilled in fertilizer with his John Deere 750 zero till drill. The seeding rate was about 75 lbs Conlon barley and 60 lbs "Super Silage"/"4010 Silage" peas per acre. The peas were bought from Blue Tag Seeds in 2008. Fertilizer used was 22-22-0-13, about half with the seed and half side banded in. On June 20 the field was sprayed with 500 ml per acre of MCPA-Na salt with the 45' county field sprayer.

On August 24th we took yield clips and estimated that John had about 4.6 ton per acre of barley and peas. The crop was desiccated at that time to stop the maturing process.

We sent a sample from the yield clips to Parkland Laboratory in Red Deer for feed testing. The analysis report showed that John had about 17.1% protein and a TDN of about 63.3%.

On September 30th the desiccated crop was swathed by Harald Magnus. We took samples and sent them to the lab. The protein level had slipped down to 14.7%. Interestingly, the TDN had actually increased to about 69.2%. We could have had some variations related to our random sampling, but that's quite a difference to be only related to sampling.

On December 31st John sampled the swaths again. The feed analysis report showed a protein level of 12.2% and a TDN level of 54.8%. The trend shown by the three

reports seems to be downward in feed quality, but plenty good for John's cows, which still had the calves on them.

John grazed the swaths with 75 cow/calf pairs (which he estimated to be about 108,000 lbs of beef) from Dec 8-Jan 26. He supplemented them with about 4 lb of pellets per pair per day from Jan 4 on. He then shipped the cows on Jan 26 and left the calves with access to the swaths while he fed them the silage bales that Gerald Knopp had made on the field just east of the old drainage ditch. The calves had to be moved out of there in early April but they sure kept working the swaths.

John thinks that there was quite a bit of shelling (both peas and barley) as the crop got too mature before it got sprayed and as the wind blew the swaths around badly and the deer and calves tramped the swaths quite a bit in the early winter. Because the swaths were so fluffy and scattered, I bunched them up at both ends and that was a very good move--it let the cattle get into them when the snow got too severe.



Photo by John Reid, solarharvest.ca



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Since the project started in 2003, John always had it in his mind to return the fields used for swath grazing back to perennial forages. John provided us with a summary of his attempt to establish new forages in fields C (home farm, east of house) and EN (west farm, along Beaver Flats Road, north of alley) in 2009.

Both fields have been direct seeded for swath grazing of annuals for several years. 2008 was a very wet growing season and barley was not seeded until early August.

At that time, fields were "lightly" disced then "flattened" with his rubber-tire float but were both very rough and uneven. Barley was floated on by AgMasters and incorporated by the rubber-tire float on field C and by the disc and float on field EN.

On May 6th the fields were sprayed with Vantage Plus using 32' county field sprayer. Some low spots on EN field could not be done because they were too wet.

On May 9th & 10th Harald Magnus cultivated the fields (lightly, not too deep) and then harrowed them, because fields were too rough to seed to hay.

On May 14th AgMasters floated on seed and fertilizer.

The fertilizer used was 15-25-0-15 lbs/ac, with half of the sulfur being a slow-release product.

Forage seed used included a little over half that was two years old; altogether, about 19 lb/ac (but some of this was coating).

Altogether, alfalfa seed used on 70 acres were 4 bags of Brett Young's #2220 blend of coated seed and 17 bags Brett Young's #7 Bloatsafe blend. New seed used was 45% Fleet Meadow Brome, 30% Oxley II Cicer Milk Vetch, 20% Kokanee Tall Fescue, and 5% Boreal Creeping Red Fescue.

The old seed used was 1 bag Boreal Creeping Red Fescue, almost a full bag of Fleet Meadow Brome (coated, several years old), 2/3 bag Kay Orchardgrass (quite old seed), 1 bag of alsike clover and 1 bag of red clover.

On June 19th John sprayed MCPA amine with the new county 45' field sprayer. Actual applied on the field was C: 220 ml/ac (target had been 250 ml/ac). Field EN received close to 250 ml/ac (the north side, ~120' wide, from wet spot west, was not done).

On June 20th John had a roadside mower come in to cut field C (home) off at about 5"-6" in order to control

weeds.

On Aug 25th Gerald Knopp haybined field EN at the west farm, baled it on August 31st and then wrapped the bales. John got 97 bales off of 34 acres at an average weight of about 1600 lbs. We took feed samples and sent them to Parkland Laboratories in Red Deer. The feed analysis report showed 15.6% protein and a TDN of 59.4%.

From September 5th to November 9th John grazed the re-growth on field C with 110 yearlings (total wt about 90,000 lbs) for 65 days. Because this field had lush growth with a high legume content, alternated this daily with second growth grass elsewhere on home quarter. John guessed that they got about half of their nutrition from field C and half from the established grass.

John also seeded legumes into a live, old pasture



Photo by John Reid, solarharvest.ca

(Fields B and J at the home farm, and ESC-E at the west farm) between April 21st and 25th. Field B is covered mostly with meadow foxtail. Field J has mostly blue-grasses, creeping red fescue and orchardgrass. ESC-E is similar to J with patches of meadow foxtail.

John used Clearwater County's John Deere 9350 drill with Eagle Beak openers to do the job. He seeded 1 lb/ac common alsike (52% of seeds), 1 lb/ac of double-cut red clover (20% of seeds) and 3 lb/ac of alfalfa (28% of seeds). The fertilizer blend was N-P-K-S: 14-23-12-12.

