

PRACTICAL FARMERS OF IOWA TESDELL CENTURY FARM FIELD DAY

WEDNESDAY, JULY 13, 5-8 P.M.

<http://www.practicalfarmers.org/news-events/newsroom/news-release-archive/22206/>

Thank you to our sponsors: Iowa Energy Alternatives, Prudenterra, HTS Ag, Heartland Co-op, and Grassland Oregon

- **THEMES**

- Operators & owners working together for conservation
- Know your numbers
- Consider long-term planning

- **AGENDA**

- 5:00 Food provided by Victor's Mexican Restaurant, Huxley
- 5:30 Welcome by Stefan Gailan, PFI, and Lee Tesdell. Introduce speakers and agenda
- 5:45 Solar presentation/Q&A by Todd Hammen, Iowa Energy Alternatives
- 6:15 Windbreak presentation/Q&A by Luke Gran, Prudenterra
- 6:45 Move to Tesdell Century Farm, ½ mile south on 2nd Street. Park along road or by round bales.
- 7:00 Hellands and Tesdell discuss partnership in conservation practices
- 7:15-7:30 Walk to waterway and wood chip bioreactor. Q&A about cover crops and no-till along the way.
- 7:30-8:00 NRCS (Paul Miller and Amanda Brown) & ISA (Keegan Kult and Adam Kiel) presentation/Q&A about wood chip bioreactor and other conservation practices.
- 8 p.m. Field day ends. Fill out evaluations.

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FACT SHEET

PHOTOVOLTAIC ARRAYS

Presenter: Todd Hammen, Iowa Energy Alternatives, Camanche, Iowa

Goal: Reduce my carbon footprint and my electrical bill. (Note that both conservation and distributed generation are important.)

- Average monthly use in 2014 and 2015: 770 kWh (average daily use: 25.66 kWh)
- Average monthly 6-panel array output over same time: 190 kWh (24.6 % of use)
- Average daily production of all 24 panels July 6-11: 42.59 kWh.

Installation costs:

- 6-panel: \$9,600.00 before 30% federal tax incentive and 15% state tax incentive.
- 18-panel: \$18,650.00 (The same incentives should be available.)

Estimated pay back is 12-15 years.

WINDBREAK MAINTENANCE

Presenter: Luke Gran, Prudenterra, Nevada, Iowa

Goal: Maintain my aging windbreak.

I had started to manage my windbreak by adding *Techny Arborvitae*. Last year I asked Prudenterra to do an assessment of my windbreak. I have 30-35 mature ash trees in my windbreak which may die due to emerald ash borer. Followed Prudenterra plan to inter-plant native species. Trees are from Iowa Native Trees and Shrubs, Woodward, Iowa. So far we have planted:

- 2 Swamp white oaks
- 4 Lindens
- 1 Kentucky coffee tree

TESDELL CENTURY FARM CONSERVATION PRACTICES

This farm has been owned by Tesdell family since 1884.

Presenters: Mike and Charles Helland, Lee Tesdell

Goals: Improve soil health and water quality while staying profitable.

- No-till soybeans and corn since 1993. Soybeans were planted into standing rye cover crop on May 15 on 50 acres. The rye had been terminated about a week before. We baled 10 acres of remaining rye on May 21 and planted soybeans into the stubble that day. That rye stubble was sprayed later.
- Cover crops (since 2012), waterway on south end (built May 2010, tiled November 2010), Bromegrass buffers along Alleman Creek in Fourmile Creek watershed (seeded 2000), and 3 east-side terraces (built April 1991) and 1 west-side terrace (built and tiled May, 2012)
 - Presenters: Paul Miller & Amanda Brown, NRCS, Ankeny, Iowa
- Woodchip bioreactor installed by local contractor, Jason Murphy (November 2013)
 - Presenters: Keegan Kult and Adam Kiel, Iowa Soybean Association, Ankeny, Iowa
 - Since May 2014, with 21 data points, we show that we have reduced the nitrates in this tile water by 46.93%. Note that our nitrate load is already low.